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The Political Economy of Productivity in Brazil

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Abstract

This paper explores the link between Brazil's political institutions and its disappointing productivity and growth in recent decades. Although political institutions provide the president with incentives and the instruments to pursue monetary stability and fiscal discipline they simultaneously raise the costs of achieving those very objectives. The insulation of certain expenditures from presidential discretion necessitates the use of other policy options, such as high taxation levels and cuts in unprotected expenditures, which put a drag on productivity and growth. In a context of robust checks and balances and interest group fragmentation, a state overburdened by constitutional entitlements has resorted to massive increases in taxation. The resulting environment possesses both essential elements for sustainable economic growth and distortions that conspire against its realization. While some improvements in productivity and growth have occurred in the past decade, the pace has been slow and incremental.

JEL Classifications: O25, O43

Keywords: Productivity, Growth, Institutions, Brazil

1. Introduction

From the 1930s to the mid-1970s, Brazil was one of the fastest growing economies in the world. Since then, average growth rates have been below par and highly volatile as the country successively failed to regain the previous level of performance, leading to the common jest that “Brazil is the country of the future, and always will be.” Even with the taming of inflation since 1994 and clearly more responsible macroeconomic policy since 1999, as well as a recent prolonged period of high prices of its main commodities, productivity and economic growth have remained depressed, with Brazil frequently below the Latin American average. This puzzling inconsistency between Brazil’s potential and actual performance has prompted several analysts to attempt to explain the main constraints that are holding the country back (Adrogué, Cerisola and Gelos, 2006; Bacha and Bonelli, 2005; Blyde, Pinheiro, Daude and Fernandez-Arias, 2008; Hausmann, 2008; Hausmann, Rodrik and Velasco, 2005; Pessoa, 2006; Pinheiro, Gill, Servén and Thomas, 2004). In Section 2, we review this literature and show that a common set of problems emerge as the most constraining, even though each group of authors ranks them somewhat differently. What does not emerge from this literature is an analysis of the political economy determinants of the policy choices that have led to these constraints and impeded the reforms that would tackle or ameliorate them.

If relaxing the more restrictive constraints would allow higher levels of productivity and economic growth, there are gains to society from placing a high priority on addressing these issues. Although one would expect this to translate into incentives for policymakers to pursue reforms toward realizing those gains, this is not necessarily the case. While such an outcome would arise under a social welfare-maximizing government or under a system of secure property rights and low transaction costs, it does not occur in the context of more complex real-world political institutions, where the incentives and constraints facing policymakers lead to situations where socially beneficial reforms fail to materialize. Political institutions determine information asymmetries and collective action problems, which affect whether policymakers are more responsive to specific interest groups than to the greater social good. They may also insulate inefficient policies and create path dependencies so that even policymakers inclined to reform cannot easily realize their aspirations. Furthermore, political institutions determine the extent to which social-welfare improving inter-temporal transactions take place where “winners” in policy decisions compensate or allow for the compensation of potential “losers” who might otherwise

prevent changes in policy. Understanding who the relevant players are, their powers and preferences, and the incentives and constraints they face is thus crucial for grasping which policies are chosen and whether or not they change over time in a socially optimal manner.

In this paper we explore the link between Brazil's political institutions and its disappointing economic performance in terms of productivity and growth in the past several decades. By reviewing the economic literature on the constraints to growth, we can assess which specific policy areas to analyze with regard to their political economy determinants. If a given policy is found to be particularly constraining and yet the opportunity to improve growth and social welfare by changing the policy to remove or relax that constraint is systematically forgone, we seek to discern which aspects of the country's political institutions drive that outcome. By mapping the economic analysis of the constraints to growth (Section 2) onto our framework of the political institutions and the policymaking process in Brazil (Section 3), we have developed a guide for determining which interest groups, political actors, and formal/informal institutions are key in perpetuating inefficient situations in the face of obvious superior alternatives.

This yields a greater understanding of the complexities involved in reforming policies so as to improve productivity and enhance economic growth. For example, rather than simply recognizing that poor infrastructure is an important constraint to economic growth and productivity, our analysis focuses on why the political choices arose and persist that led to this state of affairs and even now impede the obvious solution of investing more in infrastructure. By factoring our framework of the policymaking process into the analysis, we identify which interest groups are affected by policy regarding infrastructure and which political actors are involved in making those choices. By focusing on the preferences and relative powers of these groups and actors, as well as on the nature of their interaction, all of which are determined by political institutions, a clearer picture emerges of the determinants of policy choices and outcomes that emphasizes the trade-offs, restrictions, and interdependencies with other policy areas that are crucial given the 'general equilibrium' nature of those choices.

The puzzling choice of the systematic lack of investment in infrastructure, for example, becomes clear once one understands that Brazilian presidents are constrained in their efforts to achieve fiscal discipline by a massively hardwired budget (over 90 percent) which mandates expenditures. The only instruments available to them to achieve fiscal targets are taxation (by far

the highest in Latin America), borrowing (also stretched to the limit), and the compression of remaining expenditures, such as investment in infrastructure. For this analysis to be complete, it is necessary to explain why the president has these stated incentives and does not, as in the past, resort to inflationary financing of those expenditures. Similarly, it is necessary to understand which interest groups are associated with infrastructure and fiscal stability and why they are or are not able to influence the president and other policymakers (Section 4 focuses on the interest groups in Brazil and their impact on productivity and growth.). The example of infrastructure, together with the interconnected analysis of other even more important constraints to growth, will be developed in the remainder of the paper.

The essence of our argument in this paper is that political institutions in Brazil generate a series of policies with desirable characteristics in terms of productivity and economic growth while at the same time imposing severe constraints that hinder those same aspirations. Although political institutions provide the president with the incentives and the instruments to pursue monetary stability and fiscal discipline—necessary conditions for improvements in productivity and sustainable economic growth—they simultaneously raise the costs of achieving those very objectives. By insulating several expenditures from the president's discretion, political institutions force the use of other policy options, such as high taxation levels and cuts in unprotected expenditures, which put a drag on productivity and growth. This results in an environment that possesses many essential elements for sustainable economic growth, but where several accompanying distortions conspire against its realization. The upshot is that although improvements in productivity and growth have materialized in the past decade, the pace has been slow, gradual, and incremental.

The role of checks and balances and of interest groups in this process follows the same pattern of promoting virtuous policies while simultaneously creating obstacles for their full realization. Checks and balances, such as the judiciary and the media, are crucial in dissuading the president from deviating from policies that would create an environment conducive to productivity and growth. These very same checks protect entitlements and expenditures, thus forcing the government to seek forms of financing, such as increased taxation, which have negative impacts on productivity and growth. Similarly, we argue that the fragmentation of several major interest groups has diluted the potential negative impact of their demands on the government's expenditures. Yet at the same time it is the interest of several other groups,

enshrined in hardwired budgetary legislation, which creates the protected expenditures that force the government to use productivity-reducing policy choices to secure monetary and fiscal stability, for example by neglecting infrastructure investment.

The equilibrium that emerges from these opposing forces is one in which economic growth and improvements in productivity are realized but at a pace and scope that are limited by the constraints created by political institutions. This is in many respects a remarkable outcome, given the history of the Brazilian economy in the past several decades. Although elements that conspire against growth and productivity have always thrived, the necessary conditions for the virtuous aspects of the policymaking process to materialize are extremely demanding. Our approach thus emphasizes those aspects of the political institutions and policymaking processes that have led to this net-positive equilibrium, though we temper this assessment with the recognition of the many distortions that mitigate what is actually achieved. We further emphasize that legitimate policy changes in Brazil take a long time because of the limited fiscal resources at the president's disposal because of the binding constraint of the public's fear of inflation. A poignant example of the temporal nature of the exchanges needed to achieve reform is the ongoing case of pensions (Alston and Mueller, 2006). This case will be elaborated in greater detail in this paper. Before turning to the political economy framework (Section 3), however, we review the economic literature on productivity and economic growth in Brazil.

2. The Received Literature on Productivity in Brazil

2.1. Introduction

The purpose of this project is to analyze the impact of political institutions and the policymaking process on productivity in Brazil. In this section we set the background by first reviewing the received literature on Brazilian productivity and then by establishing the main constraints to growth from an economic perspective. The political economy origins of these constraints will then be assessed in Section 3, where we describe the policymaking process in Brazil.

2.2. The Received Literature on Productivity in Brazil

Most of the literature on Brazilian productivity is in the tradition of the neoclassical growth model, specifically growth accounting, generally based on very aggregate measures of output, capital, and labor. These approaches yield measures of productivity which are more aggregated

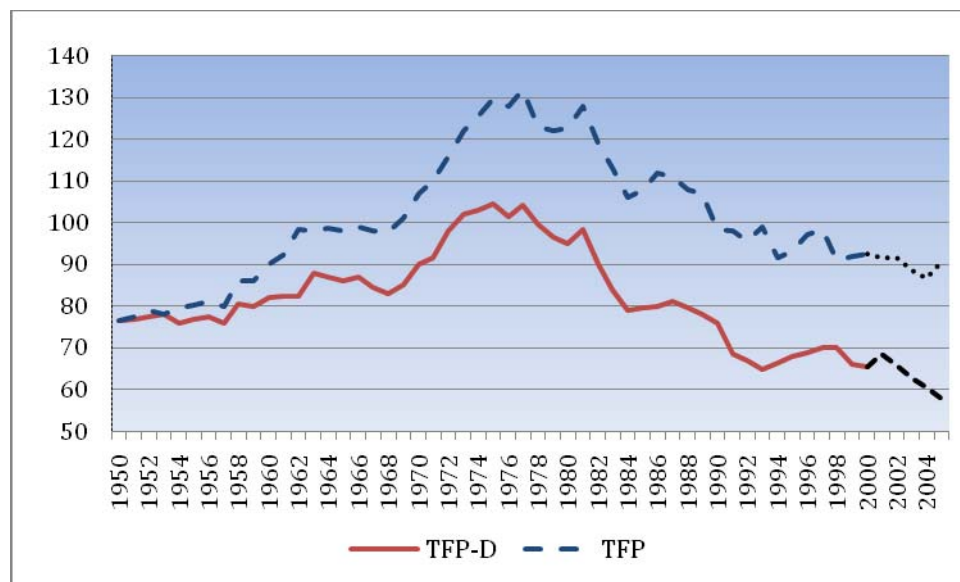
than the level of analysis of productivity that we pursue in this paper, as we want to establish the links between specific characteristics of the policymaking process and the productivity of specific economic actors and economic relationships. Nevertheless it is useful to review this literature so as to have a general picture of the proximate determinants and evolution of aggregate productivity as a backdrop to our more focused analysis.

There is a relatively small yet rich literature on economic growth and productivity that has applied the latest techniques to Brazilian data (Bonelli and Fonseca, 1998; Bugarin, Ellery, and Gomes 2002; Ferreira, Ellery, and Gomes, 2005; Gomes, Lisboa, and Pessoa, 2002; Gomes, Pessôa, and Veloso, 2003; Pinheiro, Gill, Servén, and Thomas, 2004.) These authors have engaged in a healthy debate over methods and results. Despite several smaller controversies and open issues, the general picture of the evolution of total factor productivity (TFP) in the past several decades in Brazil is reasonably consensual, with a peak in the early 1970s, a sharp fall to almost half that peak in the early 1990s, and a modest increase, if any at all, thereafter. According to Ferreira, Ellery, and Gomes (2005:3) the robustness of this general result has been widely documented in this literature, to the point where “it can be considered a stylized fact of the Brazilian economy.”

Given this relative consensus, we will base the discussion in this section on the analysis and results from Gomes, Pessoa, and Veloso (2003), which has been one of the most influential papers on total factor productivity in Brazil. This paper uses a methodology that usefully separates TFP into two separate components. The first is the variation of TFP that is common to all world economies and which is called the evolution of the ‘technological frontier.’ The second component is the difference between the regular TFP for Brazil and the technological frontier. This is called the discounted TFP. It captures that part of TFP that is specific to the country. According to the authors, this measure captures factors such as the evolution of economic policies, institutions, corruption, crime, and even natural resources. This is a useful measure of productivity for our purposes, as our interest is precisely on this class of determinants of productivity. Nevertheless, some caution is warranted when interpreting these results, given that TFP is a residual-based measure which labels as “institutional” whatever is left after all

measurable determinants have been accounted for, and thus may be capturing unrelated impacts as well as measurement error.¹

Figure 1. Total Factor Productivity for Brazil, 1950-2005



Source: Gomes, Pessoa and Veloso. 2003. Data for TFP-D 2001-2005 extrapolated using data from Yano and Monteiro. 2008. Data for TFP 2001-2005 calculated using data from Pessoa, Barbosa Filho and Veloso (2008). Care should be used when comparing 2001-2005 data given slightly different techniques and/or definitions. Figure 1 shows the TFP and discounted TFP calculated by Gomes, Pessoa, and Veloso (2003) for 1950 to 2000, with data for 2001 to 2005 calculated by us based on results in Yano and Monteiro (2008) and Pessoa, Barbosa Filho, and Veloso (2008). The graph shows that productivity experienced a long period of growth from 1950 to the mid-1970s but then underwent a sharp fall until the early 1990s. From 1992 onwards, productivity has remained approximately stable (we do not want to read much into the latter years given the separate source of data.)

An additional exercise conducted by the authors is a decomposition to determine the relative contribution to growth of the variation of each of the four components: (i) discounted-TFP, (ii) the technological frontier, (iii) physical capital, and (iv) human capital. For the entire 50-year period, in which the average annual growth rate was 2.1 percent, they find that the TFP contributed 48 percent of that growth, while human capital contributed 32 percent and physical capital 21 percent.² Of the 48 percent contribution of TFP, there was a positive contribution of the technological frontier of 72 percent and a negative contribution of the discounted TFP of 24

¹ Dani Rodrik questions the usefulness of sources-of-growth exercises and suggests that they do not really answer any interesting questions (http://rodrik.typepad.com/dani_rodriks_weblog/2008/02/what-use-is-sou.html accessed on Sept. 13, 2008).

² The authors try different methods of decomposition. We report the alternative decomposition, which attributes the capital accumulation that is induced by technological progress to TFP and to human capital.

percent. If we accept the interpretation of the discounted TFP as capturing the impact of institutional factors and economic policies, then we infer a distinct deterioration of these factors in Brazil. Looking at shorter periods of time, we can see that this negative impact of the discounted TFP took place primarily during the 1976-1992 period and that both before and after, the discounted- FP contributed positively to growth. While that contribution was very strong for the 1967-1976 period, it was only mild for the more recent period. Of the 76 percent contribution to growth of TFP in the 1992-2000 period, 72 percent was due to the technological frontier and only 4 percent to the discounted TFP. This is inconsistent with the general finding in Alston, Melo, Mueller, and Pereira (2008) that Brazil has undergone striking institutional evolution since the 1988 Constitution, although it is true that this process has been stronger in the period since 2000, which is not covered in Gomes, Pessoa, and Veloso (2003). The apparent inconsistency may also be due to the fact that, as we argued (Alston, Melo, Mueller, and Pereira 2008), institutional evolution is a slow and incremental process, which creates necessary conditions but does not translate immediately into sustained growth.

Gomes, Pessoa, and Veloso (2003) replicate the same calculations of TFP for a large set of countries to compare them with the results for Brazil. The two main outstanding features of the Brazilian case are the growth of TFP beyond the evolution of the technological frontier in the period 1967 to 1976, and the fall of the discounted TFP between 1976 and 1992. Although most countries in the world experienced a drop in productivity in this period, only other Latin American countries match the magnitude of the drop in Brazil. Pessoa (2005) contemplates what could have changed in Latin America to bring productivity from around 80 percent of the U.S. level in 1960, even reaching 90 percent in the 1970s, down to less than 50 percent in 2000. He speculates, yet does not develop or prove, that the predominant type of economic activities in the earlier period, such as the export of primary goods, did not require particularly well-developed institutions, so that productivity was not much affected by the low level of institutional development. However, as the economies diversified and began to undertake more complex economic activities, the lack of appropriate institutional arrangements to support the transactions involved began to take its toll on productivity.

Useful complements to studies that focus primarily on measuring productivity are those that try to get at the causes of the variation in productivity. One example is Cole, Ohanian, Riascos, and Schmitz, Jr. (2005), which also analyzed the great drop in productivity in Latin

America after the mid-1970s. They compare the long-run economic performance of Latin America with a group of Western countries, predominantly European, and a group of East Asian countries that had similar levels of income to those of Latin America in 1950. They show that whereas all Western countries and most East Asian countries have closed the gap vis-à-vis the United States, no Latin American countries have managed to do so. Their assessment of the determinants of this poor performance is as follows:

Latin America is a development failure because their TFP has failed to catch up U.S. TFP. Our analysis suggests that their TFP stagnation is not due to a human capital stagnation, but is rather due to idiosyncratic and long-standing Latin American choices that have impeded either the adoption of superior technologies or the most efficient use of technologies. ... This is because Latin America systematically sets up significantly more impediments to competition than the United States, Europe, or East Asia, and these impediments are associated with low productivity (Cole, Ohanian, Riascos, and Schmitz, Jr., 2005: 105)

These authors try to show empirically that barriers to competition are the main reason why Latin American producers are systematically and persistently less efficient. They do so by first presenting data that Latin America has external and internal barriers to competition that are significantly larger, both in depth and in breadth, than those in other countries. Then they present a series of case studies where barriers were removed and led to great gains in productivity. For Brazil they analyze two cases. The first is the removal of the market reserve policy started in 1977, which impeded the sale of PCs and minicomputers not produced by Brazilian-owned firms. Before the removal of this policy in 1989, there was a six-year technological gap *vis-à-vis* the United States, with productivity of the sector at 20 percent of the U.S. level. This productivity gap was reduced by one-third between 1990 and 1992, and output increased threefold. Furthermore, despite the large increase in imports that followed, this did not destroy the national industry, with several Brazilian companies remaining as the main competitors.

The second case that they present is the privatization of the iron ore state-owned enterprises started in 1991, in particular the *Companhia Siderurgica Nacional*, a steel producer and *Companhia Vale do Rio Doce (CVRD)*, the largest iron ore producer in the world at the time. They provide information on how barriers to entry led to low levels of productivity, and they

show data that document a sharp rise in measures of productivity as soon as the privatization process was started. This increase in productivity came about not only through the newly privatized companies, but also through the other private local companies that had to compete with the new *CVRD*.

Case studies such as those described above are useful to understand the channels and mechanisms through which policies lead to low productivity and generally inefficient outcomes. However, they leave open the question of why such arrangements were put in place and why they were maintained despite the recognition of their deleterious effects and the presence of obvious superior alternatives. Getting at such questions requires going into the political economy of policy choices, which is the main objective of this project and will be pursued in Section 3. The next subsection points out the major constraints to economic growth in Brazil.

2.3. An Economic Analysis of What Constrains Growth in Brazil

In order to understand the impact of political institutions on productivity in Brazil, it is necessary to determine which interest groups, through their policy demands, have the greatest effect on outcomes. Once this has been established, we can then analyze how the political institutions and policymaking process described above lead to those outcomes, as it is those institutions that determine the players, their power, and the characteristics of the political transactions that emerge. This will thus allow us to map from political institutions to productivity and economic performance.

As a first step in determining which of the myriad interest groups that vie for policy in the Brazilian economy have the greatest impact on productivity, this section seeks to ascertain the major constraints that hinder economic growth in Brazil. The idea is that if a small subset of policy area can be singled out as being particularly binding in a systematic way over time in terms of productivity and economic growth, then it makes sense to study the economic, political and social interest groups that are somehow involved in that policy area. Clearly one must avoid functionalist explanations that naively attribute to those that benefit from a set of policies the responsibility for those policies having been selected in the first place and maintained over time, as this process may be much more complex than it appears. Nevertheless, identifying constraints that systematically impede better economic performance provides a starting point for the more careful and profound analysis of how political institutions create the conditions in which those

groups are able to distort policy in their favor, possibly at the expense of general productivity and economic growth. The purpose of this section is thus to identify those groups by analyzing the literature that assesses the impediments to economic growth in Brazil, setting the stage for the subsequent section that will embed the groups identified in this section and their *modus operandi* in the Brazilian policymaking framework.

The economic literature on the impediments to growth in Brazil is vast. Brazil is a particularly good case study to analyze the impediments to growth given its past performance as one of the fastest-growing countries in the 20th century before 1980 and given its potential in terms of size, climate, geography and natural resources. Many papers on Brazilian economic growth typically start off by highlighting this compelling puzzle. Here are some examples:

In the first eight decades of the 20th century, Brazil ranked among the countries with highest growth rates in the world. During the period 1930-90, in particular, it managed to reduce its per capita income gap *vis-à-vis* industrialized economies and seemed poised to escape underdevelopment early in this century. However, this dream never materialized; Brazil's growth performance deteriorated sharply over the following quarter century... Something happened in this later period that prevented Brazil from regaining the rapid growth that it had exhibited previously. What might it have been? (Blyde, Pinheiro, Daude, and Fernandez-Arias, 2008: 1) Brazil's growth performance over the past 25 years has been lackluster. During the 1960s and 1970s, Brazil's real GDP grew at impressive rates, averaging close to 7 percent. But in the wake of the 1982 debt crisis, Brazil's growth performance deteriorated markedly... As noted by Lindauer and Pritchett (2002), in the 1970s Brazil was poised to become "the world's next economic power," but more than 20 years of stagnation since has turned the Brazilian growth experience into a "mystery" (Adrogué, Cerisola and Gelos, 2006: 3).

A mystery permeates the Brazilian growth experience. Why has the rate of GDP growth diminished so drastically since 1980, after being on average 7 percent per year between 1940 and 1980? (Bacha and Bonelli, 2005: 163, our translation)

Brazil is in a unique situation in Latin America. While most countries are in search of the products through which they can integrate their people to the global economy, Brazil is innovating in a set of high tech activities... The country has

many possibilities through which it can sustain growth for many years. In addition, health and education are improving and the democratic system has been made to work... These are major achievements. And yet, Brazil has been unable to generate significant growth acceleration (Hausmann, 2008: 29).³

Although these studies start out with more or less the same puzzle, the final answer as to what is the key binding constraint for economic growth in Brazil is not always the same, as could be expected. Nevertheless, even though each author or group of authors stresses a different constraint as the most important, the stories are not radically different; a common set of policy areas emerges from the literature as the problematic issues that would have to be addressed for the country's growth potential to be realized. It is not the purpose of this paper to sort out which of these interpretations is the most correct. Instead, we want to extract from this literature a small list of policy areas that are the most responsible for holding back productivity and economic growth in Brazil. We can then specify the interest groups that are related to these constraints and determine the role of the country's political institutions in the emergence and evolution of this state of affairs.

We start by looking at the interpretation of Brazilian economic growth in Hausmann (2008), which is an application of the Growth Diagnostics methodology developed in Hausmann, Rodrik, and Velasco (2005).⁴ The basic idea of this approach is that although there are typically several constraints to growth in any given economy, some constraints are more binding than others. Because there are typically several complementarities in the determinants of growth, it may be ineffectual to relax some of the less binding constraints if a more binding complementary constraint is not previously resolved. In order to search for these more binding constraints, it is useful to think in terms of standard constrained optimization problems where the more restrictive constraints exhibit higher shadow prices. For example, if education is a binding constraint, then the returns to education should be particularly high. Once the main constraints have been

³ The titles of these papers indicate that there is some kind of paradox to be explained: Blyde, J., A.C. Pinheiro and C. Daude and E. Fernandez-Arias. 2008. "What is Stopping Growth in Brazil?" Inter-American Development Bank, mimeo; Adrogué, R., M. Cerisola and G. Gelos. 2006. "Brazil's Long-Term Growth Performance – Trying to Explain the Puzzle," IMF Working Paper WP/06/282; Hausmann, R. 2008. "In Search of the Chains that Hold Brazil Back," Working Paper No. 180, Center for International Development at Harvard University.

⁴ In Hausmann, Rodrik, and Velasco (2005) Brazil is one of the three case studies that is used to illustrate the use of the Growth Diagnostics methodology. The application of this method to Brazil is also a chapter in Rodrik (2007).

identified, the next step is to find a testable story that explains why these symptoms have evolved.

Hausmann (2008) starts the analysis of the causes of low levels of economic growth in Brazil by discarding a set of explanations related to low returns to economic activity, either due to low social returns (low human capital, bad infrastructure) or low appropriability (corruption, taxes, property rights, fiscal stability). The main evidence that these explanations are not the key constraints, though they all are certainly problematic in Brazil, is the fact that Brazil has the highest interest rates in the world and nevertheless exhibits a reasonable level of investment/GDP. The level of interest rates reflects the fact that even with all the problems mentioned above that 'tax' investment, there is nevertheless a higher demand for capital than the available supply. This point is also made in Rodrik (2007: 78):

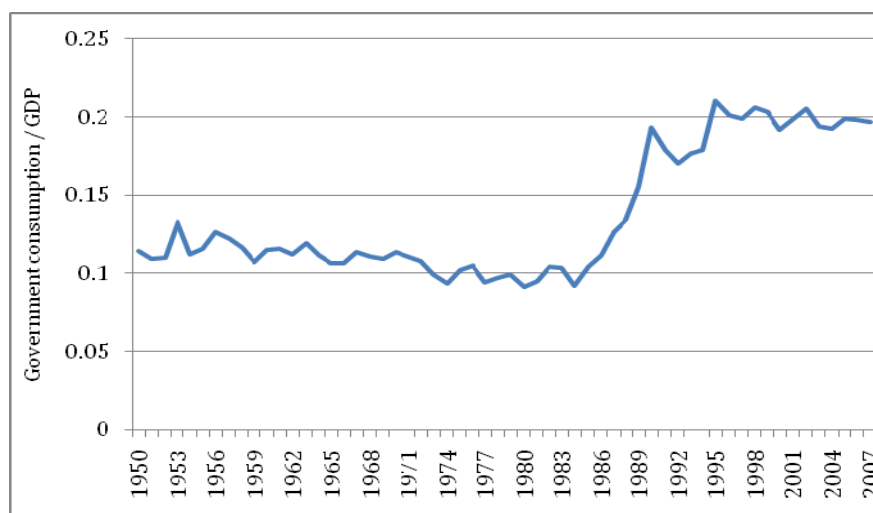
It is true that Brazil suffers from an inadequate business environment, high taxes, high prices for public services, low supply of infrastructure, insecure property rights and judicial enforcement, and inadequate education relative to some best practices benchmark. But our framework would discard them as priority areas for policy reform. This is because all these factors should depress private investment by keeping private returns low. But in spite of the subpar atmosphere, private returns are very high and investment is constrained by the inability of the country to mobilize enough domestic and foreign savings to finance existing investment demand at reasonable interest rates. If the country were to embark on a campaign to improve the business environment, it would make investment more attractive and consequently would increase investment demand. In addition it may improve the productivity of the projects that get undertaken. However in the first instance it would not relax the constraint on savings, which is where the binding constraint resides (Rodrik, 2007: 78).

Given that it is not low returns to economic activity that hinders growth, Hausmann (2008) then turns to explanations based on the cost of financing. Here, the constraint can come in the form of inefficient financial intermediation or lack of savings relative to investment demand. The author argues that although there are several inefficiencies in financial intermediation in Brazil, they are not excessively acute. The key constraint in Brazil, which if relaxed would lead

to immediate acceleration of the rate of growth, is the insufficiency of aggregate savings. Clearly, foreign savings can complement domestic savings, as they have done in recent years, leading accordingly to bouts of growth. Nevertheless, access to foreign savings has been unstable, with the current world credit crisis (2008) merely the latest example of the type of situation which has repeatedly restricted regular access to credit, this time precisely at the moment when Brazil had reached investment grade and was about to tap into previously unavailable funds.

The next step in Hausmann’s (2008) analysis is to explain why the country’s economic growth is constrained primarily by lack of aggregate savings. The problem is “a state that is overburdened by obligations in the form of a large set of entitlements and other commitments (Hausmann, 2008: 22).” In order to fulfill these obligations, the state resorts to all of the instruments it can muster, especially very high taxes, low public investment, and high interest rates, leading to a large fiscal deficit. Figure 2 shows the evolution of public expenditures in Brazil over time.

Figure 2. Government Consumption / GDP, 1950 – 2007

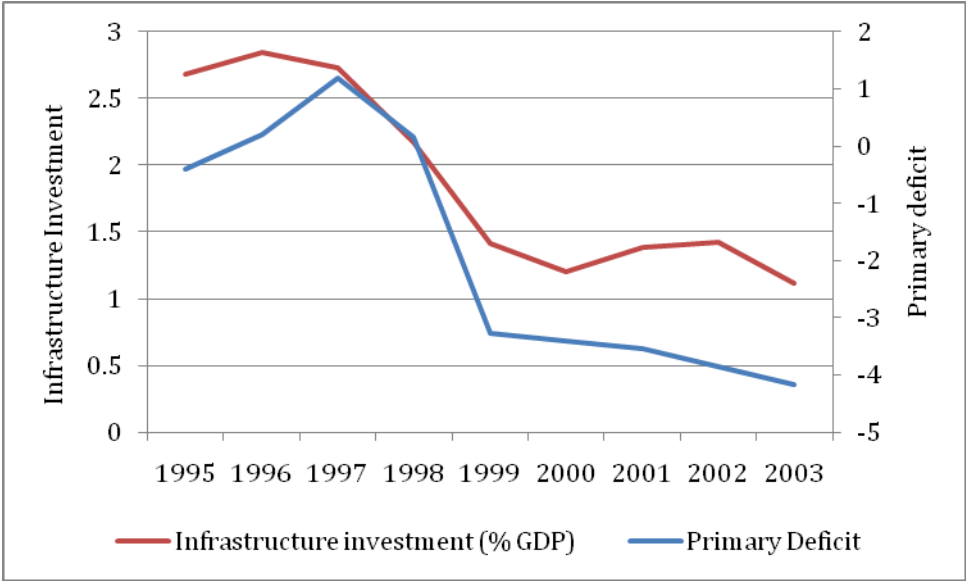


Source: Central Bank of Brazil in IPEADATA.

Blyde et al. (2008: 34) note how the sharp increase in the level of public expenditures coincides with the 1988 Constitution, which greatly increased those entitlements. Whereas the increase in expenditures was financed with inflation in the 1980s and early 1990s, after stabilization in 1994, this was achieved through increased taxation and debt financing, leading to the crisis and devaluation of 1999. In the period since that crisis, the government has maintained

extreme fiscal discipline, managing to reverse the trend in public debt and bringing it down to more manageable levels, but at the cost of an ever-increasing tax burden and the suppression of several important expenditures (which we called residual policies in our framework in Section 3), in particular those related to infrastructure. Figure 3 shows that the drop in infrastructure investment as a percentage of GDP in this period has tracked the growing fiscal effort by the government, suggesting that infrastructure investment is in fact crowded out by the state’s need to finance those other expenditures which are not similarly compressible.

Figure 3. Infrastructure Investment and Primary Deficits



Source: World Bank (2008) and Afonso et al. (2005).

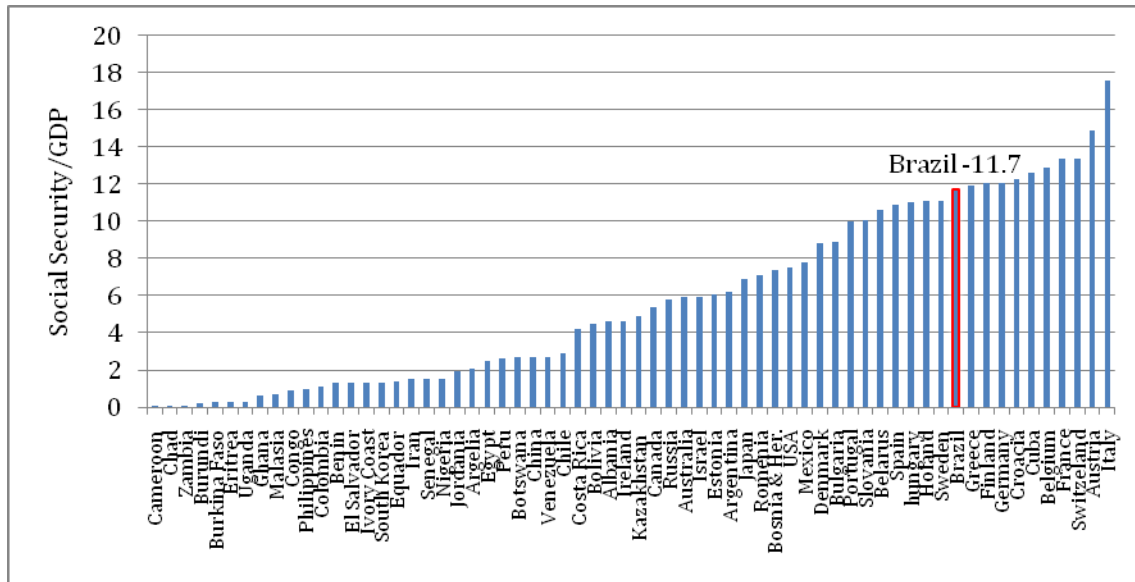
If the problem is an overburdened state which has to tax, borrow, and trim down other investments to maintain entitlements and other commitments, then which expenditures have such a constraining effect on the economy? Although there are several expenditures in this category, the one that stands out high above all others is outlays for social security and pensions. Table 1 shows that practically one-third of the federal budget is devoted to these expenditures, whereas expenditures in investments (in the discretionary category in Table 1) were less than 6 percent in 2003. Pensions in Brazil since the 1988 Constitution have been notably generous, especially in the civil service. A new group of non-contributing rural pensions was added, contributing to systematic deficits. Table 1 shows that at 11.7 percent of GDP, Brazil has one of the highest social security expenditures in the world, especially considering that the Brazilian population is much younger than that of most countries with similar levels of expenditure (Caetano and Miranda, 2006).

Table 1. The Federal Government's Budget for 2003

Expenditures	R\$ (billion)	%
Social Security	107	33
Civil Servants, Wages, Benefits	79	24
Transfers to States and Municipalities	57	18
SUS (Health System)	23	7
Unemployment Benefits	8	3
Subsidies and transfers	6	2
LOAS (Social Assistance)	5	1
Kandir law (export tax rebates)	4	1
Other expenditures	34	11
Discretionary (subset of "other expenditures")	±20	6

Source: Lima, Edilberto C.P. 2004., "Algumas observações sobre orçamento impositivo no Brasil," Brasília, Consultoria Legislativa da Câmara dos Deputados. Mimeographed document.

Figure 4. Social Security Expenditures for a Sample of Countries



Source: World Development Indicators 2006 in Caetano and Miranda (2007).

Given the list of main constraints for productivity and growth in the Brazilian economy that this review of the literature has produced, we can now try to determine which interest groups and political institutions are responsible for their emergence and evolution. Before doing so, however, it is useful to mention some other authors' evaluation of the Brazilian economy so as to assure the reader that basing our analysis on Hausmann (2008) has not led to an unrepresentative choice of constraints. Blyde et al. (2008) offer an interesting counterpoint to Hausmann (2008) because they apply the same Growth Diagnostics methodology to the Brazilian economy. Although their conclusion as to the "syndrome" holding the country back is basically the same, that is, an "overspending state," they are less inclined than Hausmann (2008) to assign to the lack of savings the role of the single major constraint. Instead they argue that "the Brazilian case does not point toward a 'smoking gun' on which to blame Brazil's poor growth performance," deciding instead on an ordering of constraints that puts human capital and inefficient taxation at the top, followed by infrastructure and savings in the second level, and finally a set of milder constraints including poor banking intermediation, fragile macroeconomic stability and access to capital markets, a poor business environment, and a large informal economy. Bacha and Bonelli (2005) find that the main cause for poor growth in Brazil over time has been the low rate of accumulation of capital due to the high relative price of capital. Pessoa (2006), on the other hand, in a more forward-looking piece, sees low levels of human capital and the impact of weak

property rights and rule of law on productivity as the main problems to be addressed. Although the studies cited above do not agree in the details, with a varied pool of constraints emerging from the set of studies, the overall stories are not radically different, with the notion of an overextended State that has to greatly tax, borrow and refrain from residual expenditures so as to fulfill a massive set of unavoidable obligations common to them all.

Note that neither Hausmann (2008) nor the other studies cited above go into the political economy determinants of the situations they portray, which is precisely the objective of this paper. The general economic story that emerges in this section is nested in the framework of the Brazilian policymaking process described in the next section. Several insights emerge from linking one to the other. In particular, that framework adds institutional details that help explain why some avenues are chosen over others. We argue, for example, that political institutions provide strong incentives for the president to prioritize monetary stability. This is an important political constraint that stops the president from using inflation or other unsustainable means to finance the expenditures that the economic analysis in this section pointed to as the origin of many of the obstacles to growth. In the same manner, our political analysis will recognize the hardwiring of several expenditures as a key aspect of the policymaking process. Only by understanding the origin and nature of the hardwiring game can one understand why the government relies to such an extent on taxation, borrowing, and economizing on residual policies rather than pursuing reductions of the hardwired expenditures as well, an issue that will be discussed in Section 5.

To conclude this section, we ask which interest groups are related to the major constraints identified as responsible for the slow rate of growth in Brazil. When confronted with inefficient policies that redistribute wealth and “tax” society as a whole, one often expects to find homogenous and well-organized groups responsible for having championed those policies. In the stories of the Brazilian economy reviewed in this section, however, no such group stands out. If any group emerges as the beneficiary of the constraints that were singled out, it is those linked to social security and pensions. This is a large, heterogeneous and diffuse group. Section 5 will address how such an unlikely group obtained these entitlements and why business interests, the more likely culprits, have failed to do so in Brazil.

3. Political Institutions, the Policymaking Process, and Policy Outcomes in Brazil

3.1. Introduction

Any economic actor pursuing productive activities will at some point or other almost certainly come up against incentives and constraints created directly and indirectly by the country's political actors and policymaking process. These incentives and constraints come in a rich variety of forms and mechanism and induce the economic actors to respond, possibly preemptively, in ways that can have important consequences to their productivity. The purpose of this paper is precisely to determine how the policymaking process in Brazil affects the productivity of the economic activities that are pursued in the country. In order to do so it is necessary to have an analytical portrayal of the policymaking process in reaction to which the economic actors establish and adjust their productive activities so as to pursue their self-interest. It can then be determined whether the constraints and incentives that emanate from the policymaking process are conducive or not to higher productivity.

The purpose of this section is to describe our analytical representation of political institutions in Brazil and the working of the ensuing policymaking process. This portrayal of the policymaking process is based on Alston, Melo, Mueller, and Pereira (2008, 2005a, 2005b). Rather than providing a detailed account that repeats those papers, we have chosen to present a summary that places all policies that emerge from the policymaking process into four closely interrelated categories that have very distinct characteristics. This is useful for the purpose of this study because each of these categories represents distinct policy arenas where different economic actors find "entry points" for their demands (in the jargon of Murillo, Scartascini, and Tommasi, 2008). Because of the specific nature of each category, different actors will find themselves predominantly affected by policies in one or more of these categories and can thus be analyzed within that context. All of the categories are interconnected, and the whole picture cannot be ignored when analyzing the impact on any given economic actor. Nevertheless, we find that this way of setting up the presentation facilitates the analysis. In what follows, before discussing the four policy categories, we briefly describe the preferences and powers of the main political actors and the political institutions under which they operate.

3.2. Political Institutions in Brazil⁵

The key feature of Brazilian political institutions is the predominant role of the president, who possesses a wide array of powers that in essence allow him/her to control the political agenda of the country very closely. These include, but are not limited to, strong decree power, line-item veto, monopoly of proposal power in some policy areas, and considerable political currency that enables the president to build a majority coalition and consequently to approve most of his/her agenda. This currency include cabinet positions, over 40,000 jobs in the federal government, and absolute discretion to appropriate funds to finance individual legislators' budget amendments ("pork"). The upshot is that the president has the means to approve many of his/her policy preferences even if at a gradual pace and having to prioritize what to pursue first.

Given that the president has these powers, what does he/she choose to do with them and what are the limitations? We argue that there are political and economic incentives for the president to wield those powers with the primary goal of achieving economic stability through responsible fiscal and monetary policy, with a long-term view towards assuring balanced and sustainable economic growth. These goals are pursued because, given the incentives that emanate from the political institutions, they are the best means to achieve the deeper and more basic Downsian goals of political survival and power. There are two main sources of these incentives. The first is public opinion and the media, which rightly recognize the president as responsible for the overall economic situation and would quickly punish a return to the inflationary practices of the past.

Given the high level of presidential power, attempts by the president to blame other actors would not be credible. Alston, Libecap, and Mueller (2008) show econometric evidence that presidential popularity in Brazil is affected in the expected directions by economic variables such as GDP growth, inflation, and interest rates. Although the average level of education in Brazil is very low, the absolute number of well-educated people is large. A diversified and competitive media fulfills an important watchdog function that serves as an important check on the government. The influence of these factors on presidential discretion in Brazil should not be underestimated.

⁵ The description of political institutions in Brazil in this subsection is very concise and does not provide examples, justifications, qualifiers, or references. For richer, more detailed accounts see Alston, Melo, Mueller, and Pereira (2005a, 2005b, 2008).

The integration of Brazil into global financial markets is the second factor constraining the actions of the president with respect to fiscal and monetary policy. Global financial markets would instantly punish deviations from responsible macroeconomic policy. Although almost all countries are subject to some disciplinary effect of global financial markets, there are several reasons why Brazil should be particularly sensitive to its impact. The fact that Brazil has a well-developed stock market and a highly diversified productive sector means that shocks from financial markets have deep conduits into the economy, giving good reasons for policy makers to be cautious not to upset those markets. Similarly, the country has a very attractive portfolio of investment opportunities, providing the government strong inducements to maintain an appropriate economic and political environment so as to attract foreign investment. The upshot is that in Brazil the temptation for the president to deviate from responsible macroeconomic policy is lower than it would be in countries with a less vigilant electorate/media and less exposure to the actions of financial markets.

In addition to the president, a series of other actors operate to a greater or lesser degree as checks on irresponsible macroeconomic policy. In some cases these checks reinforce the president's inducements to maintain monetary stability and fiscal discipline, but in other cases the very same actor can have the opposite effect, for example, by impeding attempts to get around constraints, such as hardwired expenditures, that conspire against the goals of monetary and fiscal stability. We argue that the net impact of these forces is positive, so that the president's commitment to responsible policy does not rely solely on his more direct incentives stated above.

A second set of actors are those in Congress, including individual legislators, political parties, party leaders, and others. As a result of open-list proportional representation, there are typically a large number of parties. Thus, the president always has to build a coalition if he/she is to govern. Although Congress has the power to reject much of the president's agenda, it is usually in the interest of coalition members to provide support to the president in exchange for patronage, pork, and positions in government, that are either goals in and of themselves or important means to ensure political survival. These exchanges of support for political currency are effective given the separation of purpose, where the president focuses primarily on national objectives and the legislators on geographic redistribution. As a result of these exchanges, the president has considerable ease in getting his/her policy choices approved through Congress.

This is not to say that Congress has abdicated from legislating and does not act as a check on the president, as there is a trade-off of pork/patronage for policy support that in more extreme cases may make some policies too costly, thus limiting what the president can achieve.

Several other political actors also exert important checks on presidential power. The most important of these is the Judiciary and in particular the Supreme Court, which is effectively independent of the Executive and frequently strikes down or preemptively discourages policies that are important to the Executive. This veto power is typically exerted as healthy checks and balances and not so much in confrontation or a struggle for power. This is true not only with respect to corrupt behavior; more importantly, it plays an important role in the policymaking arena given the preponderant role played by the Judiciary in Brazilian politics. This is not to say that the Brazilian Judiciary is without problems, as its lethargic pace, excessive formalism, and difficulty of access by the population impose large social and economic costs. Furthermore, the Judiciary's protection of constitutional and budgetary entitlements is often a major impediment to productivity-enhancing reforms.

Another important check, not only on the Executive but on all political and economic actors, is public prosecutors. In Brazil, they are considered a fourth branch of the republic, as they are constitutionally granted independence from all other political actors, considerable financial resources and personnel, and some of the highest salaries in the civil service. Together with a series of legal instruments that allow them to effectively threaten and constrain other political and economic actors, these characteristics make public prosecutors a key component of the policymaking process. Although each individual prosecutor is independent of the other, they tend to view themselves as zealous defenders of the diverse interests (consumers, environment, the poor, etc) that are helpless against a state that is absent, incompetent, and corrupt. In reaction to the power wielded by prosecutors, there has arisen in Brazil a sense that while public prosecutors are an important check on other political actors, a countervailing check on their own excessive power is missing.

A series of other political actors take part in the policymaking process, constraining to a lesser or greater degree the president and the other branches. Some that are worthy of mention are the governors (locally powerful but less so nationally); the *Tribunal de Contas da União* (Government Accountability Office, with considerable human and financial resources, but not

independent from Congress), regulatory agencies (independence from the Executive still being tested), and a free press.

Recently, the Federal Police has played a very active role in checking politicians and policymakers' activities. Originally designed to be an auxiliary body of the Executive on intelligence operations, the Federal Police became an important player in curbing corruption and politicians' misbehavior. Although the Federal Police does not enjoy formal autonomy from the Executive, it has acquired a high level of professionalization and *de facto* independence. As a consequence, the Executive has been facing great difficulties in controlling the behavior and mostly pyrotechnic operations of the Federal Police, which often constrains entities of the Executive branch.

3.3. Four Categories of Policies

As a result of the political institutions described in the previous section, the policymaking game produces policies, which tend to have certain characteristics. In this section we briefly describe the four categories of policies that arise from that game.

3.3.1. The Fiscal Imperative

The fiscal imperative is a natural product of a presidency that is simultaneously endowed with great political power and incentives to pursue sound macroeconomic policies. It implies that this power will be used first and foremost to ensure responsible monetary and fiscal policy so as to achieve price stability and sustained economic growth. Doing so involves making choices that are frequently abhorrent to politicians, such as imposing tough targets for primary surpluses that require cuts to be made, requests to be denied, and transfers to be limited. This behavior on the part of the president involves internalizing the up-front costs of saying "no" in exchange for the diffuse, distant benefits of future economic growth. That such behavior has been a predominant feature of Brazilian presidents, even in the improbable case of President Lula, is evidence that this is a result not so much of personal ideology, but of the incentives that derive from the political institutions described above. The upshot is that these incentives are the driving force behind the entire policymaking game, and the other categories of policies are directly shaped by these preponderant goals.

3.3.2. Exchanges of Pork/Patronage for Policies

The reforms and legislation that form the policies in the previous category have to be passed through Congress by the president. This could present a serious obstacle for the president were it not the case that political institutions grant him the power to effectively control the agenda of Congress and the political currency to purchase the required support at relatively low opportunity cost. These currencies are varied but feature most prominently the execution or withholding of amendments to the federal budget approved by the legislators, in what is essentially pork. Another important currency is the power to decide over certain policy areas in the form of cabinet positions. A third type of currency is jobs in the federal government given to the legislators themselves or to those indicated by them. These types of exchanges between the president and Congress are usually considered illegitimate or outright corrupt, yet they are institutionalized and crucial for assuring the high levels of governability required to satisfy the fiscal imperative.

3.3.3. Hardwired Expenditures and Rigid Policies

The Constitution of 1988 was devised as part of the re-democratization of the country following the demise of the military dictatorship. It was thus crucially influenced by the desire to decentralize power to sub-national units. This process was only partial and, although much decentralization did take place, the president remained the central political actor. Recognizing this fact, several groups sought to assure their interests against the prevailing presidential power, as well as against other interlopers, by hardwiring the related expenditures in the Constitution. So pervasive was this behavior that since 1988 the Brazilian budget has been one of the most rigid in the world, with typically less than 10 percent open to discretionary (non-hardwired) spending. Much of this hardwiring involves social security, education and health, but several other policy areas are included. The rigidity that results effectively constrains the president, whose attempts to subvert or get around those restrictions are only partially successful, thanks largely to the checks imposed by other political actors such as the Judiciary, public prosecutors, the General Accountability Office (*TCU*) and the press.

3.3.4. Residual Policies

With such a large proportion of the budget impervious to the president's control, achieving the intended primary surpluses requires that some other expenditure be restrained in order to achieve the necessary fiscal balance. The way found to make the numbers add up under the restrictive circumstances characteristic of Brazil since 1999 has been to suspend expenditures in those policy areas that are not essential for the fiscal imperative and that are also not hardwired in the budget. We call these residual policies. Examples are expenditures in land reform, environmental policy, anti-poverty programs, and infrastructure, among others. These policies tend to be volatile, in the sense that they receive funds and political favor during some periods only to be set aside or even reversed in others. The volatility can be traced to two different sources. The first is that these policies are contingent on the fiscal imperative, so that in periods when the macroeconomic constraints are binding, they are put in policy limbo, only to be resurrected once those constraints loosen up. The second reason is that these are the only policies over which a new president has free rein, as the macroeconomic policies must follow strict rules and the hardwired expenditures are largely predetermined. Thus, changes in administrations are frequently followed by changes, reversals, and rebranding of residual policies.

3.3.5. How Should the Brazilian Policymaking Process be Assessed?

It is the interaction of political actors with their given powers, purposes and characteristics that molds the policymaking process that yields the four categories of policies we have just described. It is common for separate components of this process to be singled out and analyzed to highlight the cost and waste of that way of doing things. The inordinate power of the president, the need to exchange pork for policy, the excessively rigid budget, and the fickleness of the residual policies all have much to be said against them. Surely there are better ways of setting up a political system. However, many of the most obvious proposed fixes for these problems, such as making the execution by the president of amendments to the budget compulsory, are often utopian and may lead to tragic unintended consequences, given the complexity of the workings of the political system. While it is true that the current policymaking process does contain several elements that are not particularly attractive, it does in exchange deliver some compensating benefits that may suggest that though these arrangements are not efficient, they may be superior under a criterion of remediability (Williamson, 1996).

Monetary stability and a sound macroeconomic environment, which are the driving objectives of this policymaking process, are probably the most important necessary conditions for improving productivity and achieving sustained economic growth, especially in a country with Brazil's economic history and the potentially fragile nature of its inflationary remission. In the remainder of the paper, we analyze the impacts of the policymaking process in Brazil on productivity in each of the policy categories described above. While this involves identifying the constraints and incentives imposed by that process on the economic actors as they pursue their productive activities, it also requires those impacts to be assessed against the gains that accrue from the macroeconomic stability, adaptability and predictability.

4. Interest Groups, the Policymaking Process, and Productivity

Interest groups, especially business interests, may negatively affect productivity in a variety of ways, including cronyism, capture by individual firms or sectors of economic policy-making, and corporatist arrangements through which groups or organizations acquire consultative or deliberative roles in decision-making processes. The upshot is that business groups are granted special protective tariffs, import licenses, and subsidized loans and are entitled to special exchange rate regimes that produce inefficient economic outcomes such as fiscal deficits or suboptimal policies. Conversely, interest groups may play a positive role when their influence is geared towards the provision of public goods such as public infrastructure and education, which benefits large sectors of the economy.

This section explains how the organization of interest groups in Brazil mitigates their potentially negative impact on growth and productivity, especially compared to other countries in Latin America. We take Hausmann's (2008) claim that an overburdened state resulting from the Constitution of 1988 is the root cause of current low growth in the country and explore its institutional determinants. Unlike Hausmann, however, we argue that the current general political equilibrium—whose net effect can be evaluated as positive—is the product of institutional features of the Brazilian political game that are not part of his analysis. We argue that although the overburdened state is the product of predatory behavior of legislators and organized interests, made possible by the unique circumstances of the Constituent Assembly, interest group fragmentation was instrumental in the Executive's success in imposing its agenda of fiscal reforms. While fiscal stability has been crucial to recent improvements in total factor

productivity, it has entailed measures that are detrimental to productivity, such as the crowding out of public infrastructure investment. We argue that the trade-off is on net positive.

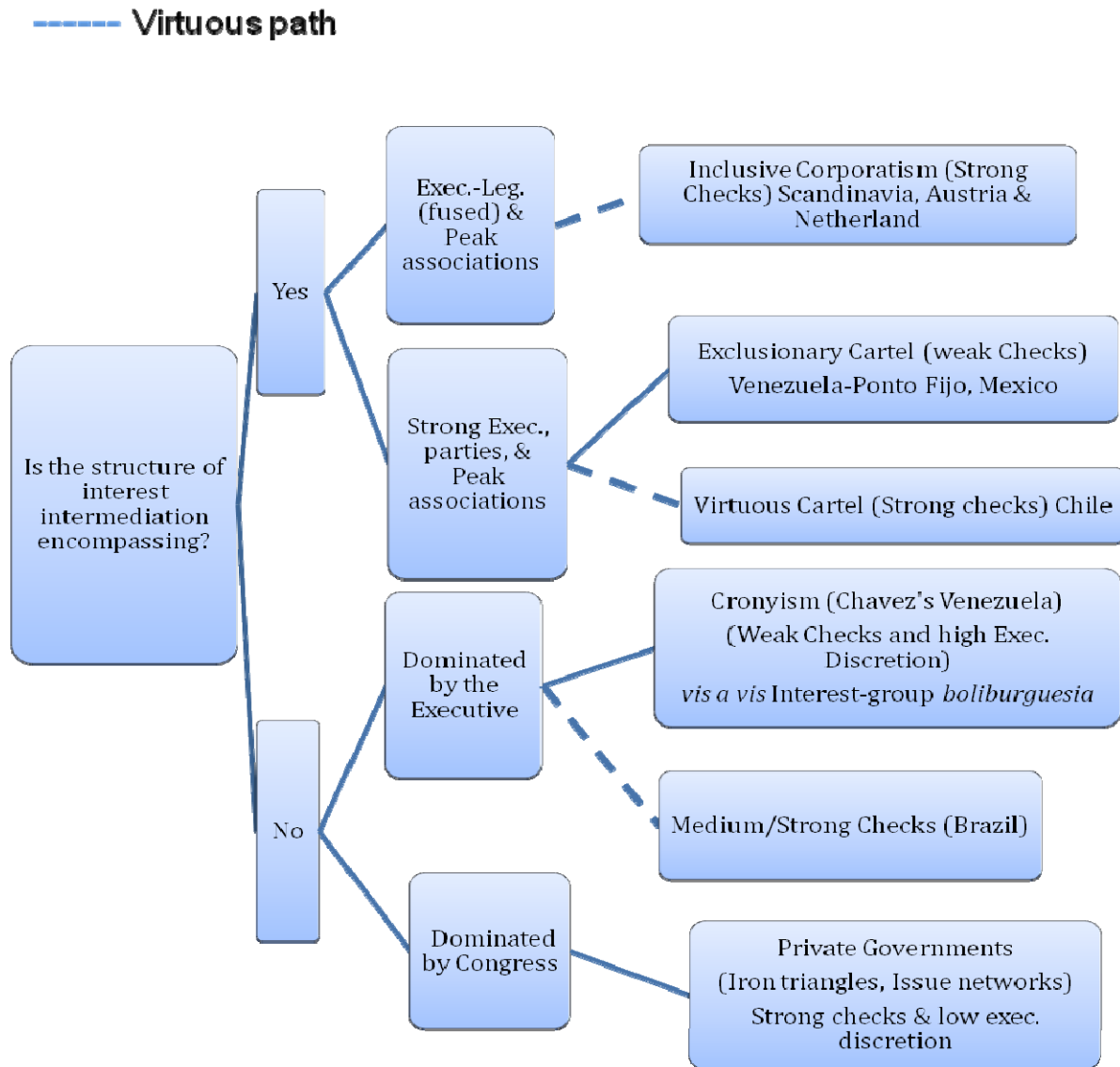
To understand how interest groups influence productivity in Brazil, we draw on Lijphart's (1999)⁶ claim that the structure of interest groups mirrors the constitutional structure of the polity. Thus, decentralized polities characterized by a federal structure, separation of powers, large number of parties, coalition governments, independent judiciaries with strong review powers, elected governors, and bicameral legislatures create incentives for interest groups to organize along decentralized lines. In contrast, polities that have strong majoritarian features such as parliamentarism, unicameral legislature, and a unitary territorial structure, and centralized governments encourage the creation of encompassing peak associations.

Under what kind of institutional arrangements is the influence of interest groups on public policy productivity-enhancing? Figure 5 schematically shows how constitutional structures are related to patterns of organization of interests. The first layer in the scheme refers to the extent to which the organization of interests is encompassing, i.e. internalizes the 'external costs' of individualized and particularistic demands of business (Olson, 1982).⁷ Encompassing organizations are conducive to productivity-enhancing policies because they tend to press for the provision of goods that exhibit public-goods attributes that are *common* demands of members. When aggregated, particularistic demands involve common pool problems or prisoner's dilemmas. Moreover, encompassing organizations help solve coordination failures and facilitate business-state cooperation.

⁶ Lijphart, Arend (1999) *Patterns of Democracy: Government Forms and Performance in Thirty-Six Countries*. New Haven, Yale University Press. Haggard, Maxfield and Schneider argue that business organizations tend to be isomorphic with government organization. "The greater the centralization of decision-making authority in the government, the more it is that business associations will be centralized. In the US, by contrast, authority is fragmented and by the division of powers and federalism; business is simply fragmented in its organization." Haggard, S, Maxfield and Schneider, B., in S Maxfield and Schneider, B. R. ed. (1997) *Big Business and the State in Developing countries*, Cornell University Press.

⁷ Olson, Mancur (1982). *The rise and decline of nations: Economic growth, stagflation, and social rigidities*. New Haven, Yale University Press. See also Doner R. F.; Schneider B.R. "Business Associations and Economic Development: Why Some Associations Contribute More Than Others." *Business and Politics*, Vol 2, Number 3, 1 December 2000, pp. 261-288.

Figure 5. Structure of Interest Intermediation



The first case characterizes corporatist arrangements through which peak associations of business and labor are incorporated in policymaking. This arrangement is typical of Scandinavian inclusive corporatism and Latin American cases, which, however, differ markedly in other dimensions. The second layer in the scheme allows differentiating the two cases on the basis of the system of government, separation of powers versus parliamentary regimes. But more importantly for our purposes is the distinction in the third layer of the figure where countries are classified according to the nature of checks on executive dominance. In centralized Latin American presidential regimes, this pattern is usually associated with weak checks and cartelized structures that exclude many relevant political actors. This pattern bears on the cases of Colombia under the *Frente Nacional*,⁸ Brazil under Vargas, Venezuela under the Punto Fijo pact, and Mexico.

A strong president who dominates the legislative agenda also characterizes Chile. Yet the legislature is proactive and professionalized and has been capable of checking the executive. Siavelis (2002) argues that in good times presidents build multiparty governing coalitions and in times of crisis resort to extraordinary and sometimes extra-constitutional measures. This institutional setting along with encompassing interest groups leads to a virtuous cartel with strong checks, leading to relatively good and stable policies.

The lower part of the Figure describes the pattern found in countries where the structure of interest organization is fragmented, differentiating the cases where the policymaking is dominated by the Executive or by Congress. The most fragmented case is that of the United States, where Congress is the key institutional locus of bargaining. In the classic congress model, congressional committees have strong terminative powers and are the key actors in the triangle that involves bureaucratic agencies and interest groups. In other models of the functioning of Congress, parties structure policy-making and reduce fragmentation. However, in both models there are strong checks that constrain political transactions and bargaining over policy.

Venezuela under Hugo Chávez is an example where the Executive dominates and there are no encompassing interest groups. Given the lack of checks on executive discretion, this case results in cronyism through the rise of a new *boliburguesía* interest group that supports the

⁸ Maxfield and Schneider, however, suggest that because the Colombian *cafeteros* articulated multisectoral demands, they played a positive role. These authors claimed that the *Asociación de Hombres de Negocios Mexicanos*, although highly centralized facilitated negotiation of reforms with the state.

government in exchange for rewards in the form of subsidies, low taxes, and other mechanisms that are withheld from the opposing groups.

Brazil represents a case of a relatively decentralized presidential democracy with medium to strong checks on the Executive. As discussed before the Executive enjoys agenda and proactive powers dominating the policy-making process. However, the states enjoy administrative, financial and tax autonomy; post-electoral multiparty coalitions are created as part of the process of government formation, and the allocation of cabinet portfolios and other governing resources (pork, patronage, policy concessions, etc.) play an integral part in coalition building and management. The existence of many entry points for business creates incentives for particularistic demands targeted at specific institutional actors. At the state level, for example, business pressures for the concessions of subsidies and abatements (exemptions and special rates for the ICMS, a provincial tax that yields a quarter of total revenue). At the ministerial level, business seeks to influence key ministries and departments, which may be occupied by coalition members. Unlike the United States, Brazil is a hybrid system in which there are several sites for interest articulation.

The upshot of these distinct institutional arrangements is that interest groups are fragmented and there are no peak associations encompassing the interests of business. Hence, the characterization of Brazil as displaying “U.S.-style fragmentation in business politics.”⁹ As argued by Schneider (1995),¹⁰ business in Brazil appears to have strong business associations, but in fact many formally imposing organizations do not represent business effectively in large part because of the corporatist framework imposed on them in the 1940s. In the 1980s, several groups of industrialists recognized these limitations and formed new sectoral associations.¹¹ They were created along sectoral lines, however, and no encompassing organizations were formed.

In Brazil, an independent judiciary, the *Ministerio Publico*, and an active *Tribunal de Contas* – in addition to an independent media, effectively constrain the powers of the Executive and check abuses of power. Medium to strong checks on the Executive prevents its relations with

⁹ Schneider, Ben Ross (2005). Business politics and policy making in contemporary Latin America, Prepared for the Workshop on State Reform, Public Policies, and Policymaking Processes at the Inter-American Development Bank, Washington, D.C., 28 February – 2, March, 2005.

¹⁰ Schneider, Ben Ross (1995) La burguesia desarticulada de Brasil, *Revista Mexicana de Sociología*, vol. 57, n°4, pp. 135-153 .

¹¹ Schneider argues that while the new associations have enhanced the representation of some segments of business, overall they have disarticulated business representation in Brazil.

interest groups from degenerating into cronyism, as in some other Latin American countries. On the other hand, an independent judiciary that provides standing rights of petitions alleging unconstitutionality violations to corporations also means that business has incentives to lobby and appeal to the judicial system to block or delay the enforcement of legislation.

The fragmentation of interest groups has precluded the development of first-best negotiated solutions involving encompassing organizations, as illustrated by the historical record of many countries. Although this political equilibrium can be considered suboptimal, it has been extremely functional given that public-private cooperation has generally been governance-enhancing, particularly in areas that affect productivity such as innovation, R&D, and foreign trade.¹² Macroeconomic stability and fiscal sustainability have improved and the associated political costs have not been significant owing to relatively low political transaction costs. The exception to this rule has been the difficulty of imposing costs on key constituencies, particularly on the vested interests entrenched in the state apparatus, a key part of which represents entitlements. Consequently, fiscal balance has been attained by rising taxation rather than by expenditure cuts. Business interests have been unable to forestall the massive expansion of taxation as a result of their fragmentation.

While tax policy has been highly detrimental to business interests, the availability of subsidized credit from the BNDES—the huge federal development bank—raises the possibility that, contrary to our claims above, business interest are in fact able to coordinate and pressure for transfers that more than compensate for the increased taxation.

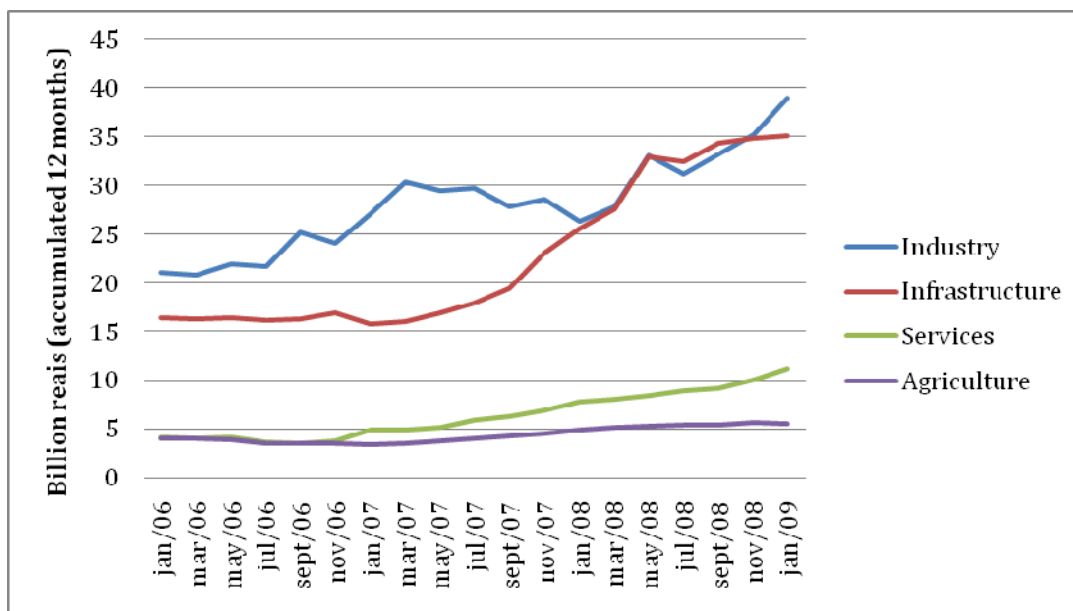
The magnitude of the resources commanded by the BNDES is certainly significant; approximately 92 billion *reais* were effectively lent in 2008, which is almost 5 percent of GDP and 14 percent of gross fixed capital formation (BNDES, 2009:3). The interest rate for BNDES loans—TJLP (the long-term interest rate)—is significantly below the market rate, so there is clearly good reason for firms to vie for the privilege. What we would like to determine is whether the availability of these subsidized loans counterbalances the high levels of taxations for Brazilian firms. Unfortunately, the BNDES does not make public data at the firm level that would allow us to see which groups are being contemplated. Figure 6 shows the portfolio by

¹² The flagship examples of success in this area have occurred in the aeronautics and agricultural sectors, where public-private partnerships have been extremely successful. The Itamaraty has played an active role in trade promotion. Similarly, public research institutes such as Embrapa and INPE are key to the sectoral success stories. See Melo, Gaetani, and Pereira (2005).

sector where infrastructure and industry are shown to predominate, with 35.1 percent and 39.0 percent, respectively, of the total disbursements in the year to January 2009. At this level of aggregation it is hard to discern which firms are effectively benefiting the most. According to Hausmann (2008: 15), however, compared to the size of the economy the BNDES disbursements are not that big. Thus, "... it is hard to argue that at the margin investments are being financed by BNDES except in some selected sectors and programs."

We have not been able to find in the literature much indication that the competition among interest groups for these loans has had a significantly perverse effect. The major criticism against the BNDES has been related to the impact of its lower interest rates on monetary policy, as this requires the Central Bank to maintain the market rate higher than would otherwise be the case (Arida, 2005; Hausmann, 2008: 26). Thus, although we cannot rule out that the BNDES is a potentially important channel through which interest groups are able to demand compensation for the oppressive tax policy, our conjecture is that here, too, the Executive is able to impose its preference, using the BNDES as an additional instrument to pursue its policy agenda. This is clearly an area that deserves further research.

Figure 6. BNDES Disbursements by Sector (in R\$ billion)



Source: BNDES (2009: 6).

4.1. Business Groups and Interest Intermediation

In addition to the constitutional structure of the polity, other factors that affect the influence of business include the size of economic groups, their diversification and export orientation, and assets and operations abroad. For instance, Table 2 shows that despite the fact that Brazil has the largest mining company in the whole world, mining represents just 1 percent of Brazilian GDP (as opposed to 20 percent in Ecuador). It also shows that despite the fact that Brazil is one of the world's largest exporters of agricultural commodities, agriculture represents only 5 percent of Brazil's GDP.

Table 2 also demonstrates that Brazilian economic activities are fairly decentralized, with the Herfindahl-Hirschman index (HHI), which measures the market's concentration, at the level of 0.14. This level seems to be similar to levels in other Latin American countries. However, it should be interpreted with caution because when we take a closer look at Brazilian firms, we can see that Brazil's private firms contrast with firms elsewhere in Latin America or other developing countries and transition economies in a number of dimensions. Brazil's top 10 or 50 largest private groups are relatively smaller (see Table 3) and less diversified (see Table 4) than their counterparts. The country's largest groups account for a smaller share of GDP than in other developing countries and resemble a pattern of specialization and concentration similar to the United States (see Table 5).¹³ In addition, some of the country's national champions are private firms—such as Embraer (airplane manufacturer) and Vale (world's largest iron producer)—which were formerly state-owned and in which the government has golden shares, giving it a veto over key decisions (Schneider, forthcoming).¹⁴

¹³ Some of these features can be explained by legacies from the developmentalist era. Firms were encouraged to enter into partnerships with multinational companies and were prohibited from expanding in their markets, which limited size due to the internal orientation of import substitution industrialization.

¹⁴Schneider, Ben Ross, "Big Business in Brazil: Leveraging Natural Endowments and State Support for International Expansion." In Leonardo Martínez-Díaz, ed., *Brazil as an Emerging Economic Superpower*. Washington, DC: The Brookings Institution (forthcoming).

**Table 2. Economic Activity in Latin America and Herfindahl-Hirschman Index (HHI):
1990-2007**

Country	GDP	Agriculture	Mining	Manufacturing	Elect., Gas, & Water	Construction	Retail	Transp. & Commu.	Banking and Ins.	Services	HHI
Uruguay	19052.59	1313.30	47.16	3505.25	726.04	1027.78	2477.22	1641.52	4913.59	4107.17	0.18
%	0.01	0.07	0.00	0.18	0.04	0.05	0.13	0.09	0.26	0.22	
El Salvador	12302.63	1274.70	51.00	2779.23	222.82	558.28	2374.07	1036.85	1996.69	1758.75	0.16
%	0.01	0.10	0.00	0.23	0.02	0.05	0.19	0.08	0.16	0.14	
Panama	11151.03	767.63	78.79	1057.77	297.46	454.84	1859.96	1485.41	2777.05	1909.31	0.15
%	0.01	0.07	0.01	0.09	0.03	0.04	0.17	0.13	0.25	0.17	
Guatemala	16290.67	2356.67	103.83	3301.82	381.00	654.11	2058.75	927.48	2139.21	3635.41	0.15
%	0.01	0.14	0.01	0.20	0.02	0.04	0.13	0.06	0.13	0.22	
Costa Rica	15030.82	1297.40	24.50	3207.48	348.81	603.44	2631.13	1255.93	1821.70	3016.36	0.15
%	0.01	0.09	0.00	0.21	0.02	0.04	0.18	0.08	0.12	0.20	
Mexico	587827.62	25446.73	38129.32	114814.08	6484.39	37023.11	105423.79	53914.43	112129.35	83481.46	0.15
%	0.29	0.04	0.06	0.20	0.01	0.06	0.18	0.09	0.19	0.14	
Dominican Republic	21570.03	1550.82	95.93	4832.67	431.56	1195.26	3420.78	1947.43	3095.84	3747.29	0.14
%	0.01	0.07	0.00	0.22	0.02	0.06	0.16	0.09	0.14	0.17	
Argentina	271585.19	12973.96	6542.66	47905.08	5861.01	13216.22	42082.96	22568.47	48731.14	54379.97	0.14
%	0.14	0.05	0.02	0.18	0.02	0.05	0.15	0.08	0.18	0.20	
Brazil	627653.75	30988.42	9102.22	96749.46	17836.42	29755.17	57024.42	43873.39	98511.21	166256.72	0.14
%	0.31	0.05	0.01	0.15	0.03	0.05	0.09	0.07	0.16	0.26	
Honduras	7157.19	1032.60	33.07	1459.61	141.16	391.07	1022.65	582.15	1055.51	1075.65	0.14
%	0.00	0.14	0.00	0.20	0.02	0.05	0.14	0.08	0.15	0.15	
Venezuela	117681.30	4396.74	19060.24	21543.83	2559.02	9422.00	11783.18	8078.04	16554.48	21471.17	0.14
%	0.06	0.04	0.16	0.18	0.02	0.08	0.10	0.07	0.14	0.18	
Paraguay	7255.06	1295.97	8.88	1112.98	158.75	375.92	1365.13	466.33	586.02	1247.61	0.13
%	0.00	0.18	0.00	0.15	0.02	0.05	0.19	0.06	0.08	0.17	
Chile	71148.77	3786.92	4362.49	11733.35	2016.61	4777.55	7775.98	6294.45	15543.06	11578.19	0.13
%	0.04	0.05	0.06	0.16	0.03	0.07	0.11	0.09	0.22	0.16	
Nicaragua	3682.79	655.64	24.45	579.17	111.08	209.88	525.06	185.61	444.93	677.41	0.13
%	0.00	0.18	0.01	0.16	0.03	0.06	0.14	0.05	0.12	0.18	
Colombia	95527.37	9100.10	5098.79	14245.00	2982.92	4869.60	12931.17	5868.43	16258.16	16940.92	0.12
%	0.05	0.10	0.05	0.15	0.03	0.05	0.14	0.06	0.17	0.18	

Table 2., continued

Country	GDP	Agriculture	Mining	Manufacturing	Elet., Gas, & Water	Construction	Retail	Transp. & Commu.	Banking and Ins.	Services	HHI
Peru	52069.15	3740.62	2730.36	7721.90	1146.10	2851.76	9222.43	4255.74	7078.29	8806.89	0.12
%	0.03	0.07	0.05	0.15	0.02	0.05	0.18	0.08	0.14	0.17	
Ecuador	16785.44	1648.09	3388.10	1197.05	148.21	1371.85	2818.22	1607.49	1489.43	1731.70	0.12
%	0.01	0.10	0.20	0.07	0.01	0.08	0.17	0.10	0.09	0.10	
Bolivia	8041.64	1074.49	547.97	1077.25	223.17	226.85	828.87	898.01	904.82	1371.22	0.11
%	0.00	0.13	0.07	0.13	0.03	0.03	0.10	0.11	0.11	0.17	
Latin America	2024023.16	107519.60	89775.32	344013.67	42635.52	111619.43	276290.14	159884.77	338310.00	396460.31	0.13
%	0.98	0.05	0.04	0.17	0.02	0.06	0.14	0.08	0.17	0.20	

Table 3. Sales of the 10 Largest Business Groups in Selected Countries in 1995

	Sales (% of GDP)		Sales (% of GDP)
Argentina	11	India	6
Brazil	8	Indonesia	25
Colombia	28	South Korea	49
Mexico	10	Taiwan	19
Latin America	14	Average for Asia	25
Average for Large Countries	12	Average for Smaller Countries	27

Source: Schneider (2009) and Guillén (2001: 72).

Table 4. Diversification of Large Business Groups in Asia and Latin America

	Diversification	Assets in finance
East Asia	1.65	.01
Korea	1.7	--
Taiwan	1.6	.01
Southeast Asia	2.9	.47
Indonesia	2.1	.45
Philippines	3.1	.6
Thailand	3.5	.35
Latin America	3.07	.15
Brazil	1.4	--
Chile	5.1	.24
Mexico	2.7	.05

Source: Schneider (2009); Khanna and Yafeh (2007).

Table 5. The Super Rich in Latin America and other Regions

Country	Total Net Worth (as % of GDP)			Number of TWOs		
	1996	2000	2007	1996	2000	2007
Selected Latin American Countries						
Argentina	2.60	2.08	0.79	3	4	1
Brazil	2.39	3.64	3.94	10	9	18
Chile	12.31	5.06	8.78	5	3	3
Colombia	4.54	1.27	7.65	3	1	2
Ecuador	5.94			1		
Mexico	8.93	5.17	8.82	15	13	10
Peru	1.86			1		
Venezuela	3.10	5.72	6.50	2	2	2
Sub-Total	5.21	3.79	6.08	40	32	36
Other Selected Countries						
China			1.00			19
India	1.32	6.32	16.57	3	9	33
Russia			26.06			50
UK	1.16	2.24	7.62	6	15	50
USA	4.22	5.30	10.24	135	53	407
Sub-Total	9.08	7.19	9.18	423	322	945

Source: Solimano (2008), *Forbes Magazine* Rankings (1996, 2000, 2007), and Economic Intelligence Unit (2008).

The lack of peak associations and the fragmentation of organized interests in Brazil have three major implications. First, it helps mitigate business capture of the state and potential productivity-diminishing policies. According to Hausmann et al. (2008), this is exemplified by the telecommunications sector in Mexico, where there is evidence that one firm has veto power over policy in this sector, with detrimental consequences for productivity. Second, it lowers the political costs of governing and enhances the ability to impose losses on key business constituencies, as illustrated by tax policy initiatives in the last decade and a half. Third, it gives policy-makers in the Executive the upper hand in their relations with business and its representatives in Congress. Because business faces collective action problems in mobilizing against the executive agenda, presidents, and particularly core bureaucracies, enhance their ability to pursue their agenda. These two factors help explain the Executive's ability to pursue its preferences ("the Executive's fiscal imperative") and stabilize the country in the late 1990s and early 2000s. Specifically, the Executive has been able to respond effectively to the fiscal imbalances created by the expansion of entitlements following the enactment of the Constitution of 1988. This involved a very significant expansion of taxation equivalent to 10 percent of GDP between 1993 and 2004. It is highly significant that this huge revenue-raising effort has been imposed on business, particularly via social contributions, amidst intense business opposition, which nonetheless has never reached the point of tax revolts. Business staged a number of demonstrations, particularly during the tax reform initiatives in 1995 and 1997-99. In fact, one of the country's most important captains of industry—Jorge Gerdau¹⁵—ran a campaign through a business organization *Ação Empresarial* in favor of the reform initiative and against the tax burden. This campaign turned out to be ineffective and was discontinued.

Other notable examples of reaction against excessive taxation include the campaign run by the banking and financial industry against the CSLL—the social contribution on net profits.¹⁶ The banking association resorted to the Judiciary with mixed results over the last decade, but the net balance is on the government side. The only episode of a major legislative initiative was the defeat of a provisional measure calling for new taxes on small and middle-sized business and

¹⁵ The Gerdau group is the largest producer of long steel in the Americas and has 317 industrial and commercial facilities in 14 countries.

¹⁶ The Brazilian Federation of Banks (Febraban) and the political parties filed several requests for a writ of unconstitutionality (ADIN) against the CSLL (STF recebe segunda ação contra CSLL de bancos). Valor Online 01/07/2008.

rural producers (MP 232), in March 2005, amidst the *mensalão* scandal.¹⁷ The unique circumstances face by the Lula Government can explain this isolated defeat, when pressures for his impeachment were very strong.

If organized interests in general, and business in particular, are weak vis-à-vis the state, what factors explain the predatory behavior that led to the entrenchment of a vast array of entitlements in the Constitution of 1988? What factors allowed organized interests to benefit disproportionately from the constitutional charter? The explanation we offer is that the Constituent Assembly was a unique setting characterized by the absence of the Executive as the agenda setter, which is the case of “politics as usual” in Brazil, even with respect to constitutional amendments. The Assembly’s procedure was unusually decentralized and is best characterized as “extraordinary politics.” Governors were the key actors in the Assembly because of the legitimacy they acquired from having been directly elected for the first time in nearly 20 years in a context in which the new civilian president himself had been chosen by the rules for Electoral College introduced by the military. More importantly, the ordinary legislature that drafted the Constitution responded to a vast array of repressed demands of a redistributive nature and as well as demands for decentralization and privileges for specific categories such pensioners, economic sectors, and civil servants. The “Christmas tree” approach to the Constitution resulted in a long and detailed document that did not fit the budget constraint.

Throughout the 1990s, successive presidents attempted to alter the Constitution. Despite the fact that under Cardoso many amendments and key infra-constitutional changes were successfully passed, in key areas such as social entitlements and the constitutionally mandated transferences to subnational governments, a number of factors contributed to undermine the Executive’s attempts. These include the Judiciary, which acted as a veto point in a number of cases; the requirements of coalition management in the form of pork and side-payments which, despite their low cost, implied in additional burden; and the resistance opposed by key groups inside the governing coalition. Under democratic rule, the public sector expanded significantly particularly at the subnational level, in the Judicial and Legislative branches. Current expenditures also expanded greatly. Reforms that imposed costs and retrenchment faced the fierce opposition of organized clienteles and the lukewarm support from the public at large.

¹⁷ “Governo desiste de MP 232 e Imposto de Renda volta a subir em abril,” Folha de São Paulo, 5/03/2005. “Planalto estuda desistir da MP 232 para evitar derrota” Jornal do Brasil, 24/03/2005.

Although the Executive had the ability and incentives to impose losses, it also resorted to the minimal effort alternative: raising taxes.

As discussed in Section 4.2, because the Executive inherited an extremely hardwired budget, the Federal Executive in the post-Constitution phase has had to resort to a two-pronged strategy of de-earmarking funds and at the same time accommodating new earmarking specially designed to secure support from key constituencies. The resulting enormous expansion of taxation has overburdened the state and is a key binding constraint to raise productivity and, ultimately, economic growth. The upshot of this game is that expenditures in public sector pensions, salaries and social transfers have crowded out investments in infrastructure, particularly transportation, and education, and ultimately has led to high interest rates. These constraints are to a large degree the cost paid for the benefit of fiscal and monetary stability, a trade-off, we argue, which is on net positive.

As discussed later in the paper, from a dynamic perspective, the pursuit of the fiscal imperative is positive and does not represent short-termism. Rather, it is the precondition for sustained development in the long run. Over time, as the ratio of public debt to GDP falls and interest rates decline, a stable macroeconomic scenario will emerge and sustainable development should ensue. These are the preconditions for the resumption of infrastructure investments. Similarly, a reduction in the tax burden might also be possible.

Business interests were appeased in this high-tax environment (and appreciated exchange-rate due to the influx of FDI) because a variety of mechanisms helped to compensate for the losses involved. We argue that although these side-payments have helped secure their support they do not fully make up for the losses. They included tax exemptions and particularly subsidized loans from the National Bank for Social and Economic Development (BNDES), discussed above. In addition, the high returns to investments imply that high taxation does not entail low appropriability, which would discourage investment.

4.2 Productivity, Fiscal Policy, and the Hardwiring Game

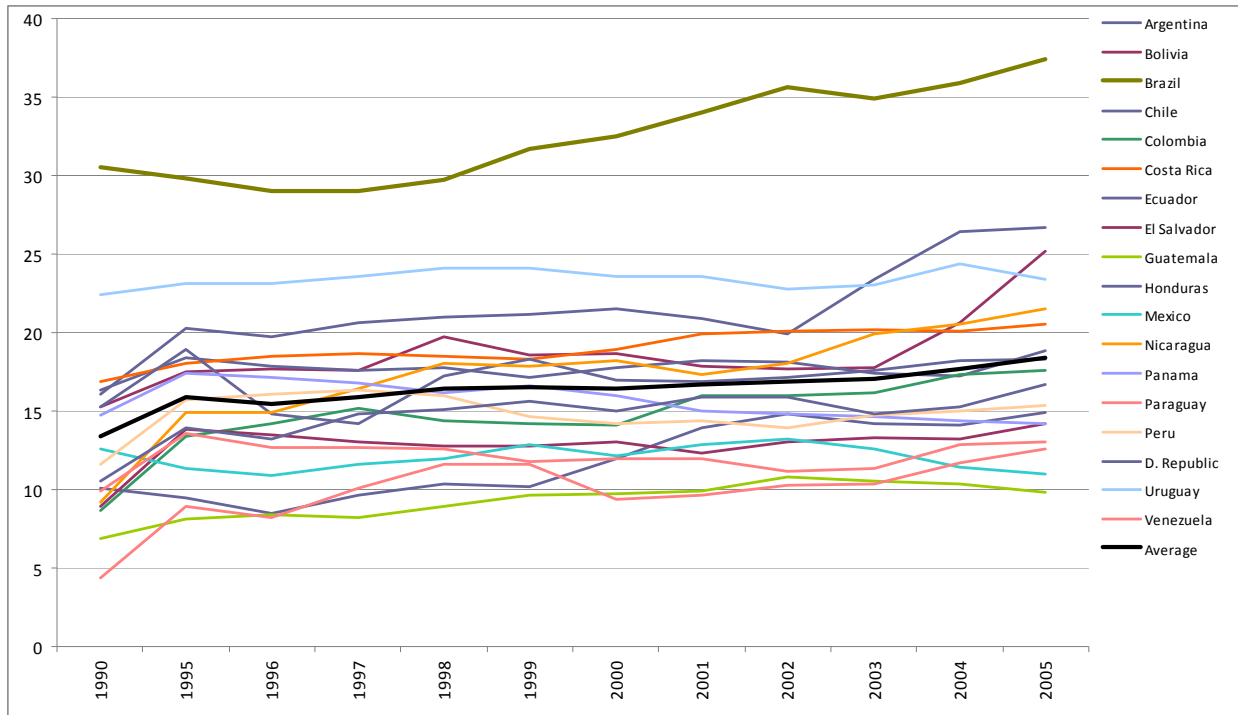
4.2.1 The Hardwiring Game and Transport Infrastructure

As indicated before, there is some consensus on the constraints affecting productivity in Brazil, despite some disagreement regarding which is the most binding. The list includes the high cost of doing business due to the country's extremely high tax burden, the cost of capital, and the

precarious state of its infrastructure. As Hausmann has argued, the high return on investment explains the fact that high taxation has not been the binding constraint to growth. Similarly, the state of infrastructure, particularly road transportation, should be seen not as a binding constraint but as the upshot of a general political equilibrium associated with an overburdened state resulting from the expansion of entitlements. As discussed above, the drop in infrastructure investment as a percentage of GDP in the last decade has tracked the growing fiscal effort by the government, suggesting that infrastructure investment is in fact crowded out by an overburdened state. This tradeoff should be understood dynamically: it is expected that infrastructure investments will return once the fiscal situation is stable. In the short term, the net gain depends on the relative magnitude of the productivity losses associated with inadequate infrastructure and the gains resulting from a stable macroeconomic environment.

Indeed, currently estimated at 38 percent of GDP, Brazil's tax burden is twice the Latin American average (see Figure 7). Highly inefficient and inequitable, the country's tax system has been resistant to reform, and its structure reflects the influence of vested interests in the area of taxation and budgeting. To be sure, as indicated before, policy outcomes in these areas have not been entirely negative and the ability to raise revenues has also generated social gains such as fiscal sustainability and price stability, which have positively affected productivity. Overtaxing over the last 15 years, in fact, has turned out to be a remedy for pressing fiscal problems when expenditure cuts proved to be politically unattainable.

Figure 7. Tax Burden in Latin America 1990-2005



Source: CEPAL-STAT.

Alston, Melo, Mueller, and Pereira (2006) have described the taxation and budgeting game as a hardwiring game. In this game, the president has a fiscal imperative and responds to the electorate’s growing aversion to inflation and increasing preferences for price stability as well as international constraints posed by the country’s ratings in international markets. In turn, the president has to secure the support in Congress for his/her agenda and therefore has to respond to demands from coalition partners.

Although the Executive has the upper hand in the budgetary process due to his/her agenda powers, ability to impound approved funds, and powers of initiation of money bills, when proposing a budget for approval he/she must reconcile the fiscal imperative with the demands from coalition partners. This is accomplished by means of earmarking funds for specific projects or spending categories. In the wake of the changes brought about by the Constitution of 1988, a vast array of earmarking was already built into the annual budgets. These included funds earmarked for social security expenditures, mandatory transfers to subnational governments, and myriad small categories of hardwired expenditures benefiting special interests. There are important path-dependent mechanisms associated with this legacy from the Constitution, which

the Executive had subsequently attempted to reverse or mitigate with varying degrees of success across issue areas.

Alston et al. (2006) have established the broad outlines of this game but do not develop its implications for productivity. We hypothesize that when evaluated from a dynamic perspective, the equilibrium from this game is detrimental to productivity in the short term, in particular due to its impact on the tax burden and the infrastructure sector. As Grossman and Helpman (2006) argue, hardwiring is expected to be more extensive in separation of powers systems when the Executive's constituency is much broader than that of the legislature because the latter will try to tie the Executive's hands. In countries such as Brazil where the Executive enjoys significant controls over the budgetary process, we hypothesize that there will be mutual attempts at hardwiring the budgets by both the legislature and the Federal Executive.

Having inherited an extremely hardwired budget, the Federal Executive has pursued the de-earmarking of funds while simultaneously accommodating new earmarking with the purpose of securing support from important constituencies. Indeed, earmarking skyrocketed from about 30 percent in 1970 to over 80 percent of the budget in 2002,¹⁸ despite the successful approval of several de-earmarking initiatives that required the approval of constitutional amendments.

This sequential bargaining game was sustainable because of rising taxation. The tax rate increased by 10 percent of GDP between 1993 and 2004. This was made possible by the strong administrative capacities of the Brazilian state. While organized interests were able to hardwire expenditures when the constitutional window of opportunity was open and had mixed success in resisting expenditure cuts that affected them, they were unable to offer effective resistance against taxes, most of which have been consumption taxes. Earmarking was extensively applied in the social area, accounting for a significant portion of this additional tax take.¹⁹ New earmarked revenue sources were created for poverty alleviation, education, and health. While responding to new congressional demands in these areas, the Federal government saw these funds as potential sources of revenue enhancement that could be used to legitimize new taxes. These earmarked programs liberated funds elsewhere in the budget, leading to an expansion of

¹⁸ Lima and Miranda (2006) has estimated that mandatory expenditures accounted for 92 percent of the 2005 budget. Other estimates are provided in Rajkumar (2004) and Motta (2008).

¹⁹ This is consistent with predictions from the literature on the welfare consequences of democratization because as countries democratize the demands from the median voter, whose income is below that of the mean, sets in motion a process of redistribution particularly towards programs affecting large constituencies. However, programs catering to narrow constituencies have not been cut. See Melo (2008).

executive leverage over the budget and setting in motion a process of new demands for earmarking and additional taxes. This was made possible because new earmarked revenue sources were created in areas where expenditures were already mandatory and rigid (for example, social assistance entitlements or primary education). We call this type of hardwiring “symbolic.” It is used strategically to amass support for new hardwiring but its net effect is not to increase investments in the sector.

4.2.1.1 The Case of CIDE

The case of CIDE, a new tax/contribution on fuels created in 2001, illustrates the sectoral dynamics of the hardwiring game in the area of transport infrastructure.²⁰ This area has been recognized by political actors, pundits, business, and the media as one of the most fundamental bottlenecks to growth in the country. Indeed, the national road network has stagnated since the late 1980s. Of a total 1.7 million km of roads, surfaced roads only account for 9.4 percent. Federal roads barely come to 5 percent of the total, with just 56,000 km actually surfaced. States maintain the lion’s share, and the share of paved roads in total is equally dismal, accounting for only 10 percent. As Afonso et al. (2005) have argued, these statistics alone give a good idea of not only the precariousness of the conditions of road transport, but also how advanced state decentralization in this area has become. Decentralization in this case has amounted to neglect and stagnation.

Privatization has advanced very little in the infrastructure area, even in the area of roads. According to Afonso et al. (2005), in 2004 there were only 36 private highway concessions in operation in the country (only nine under federal concession), in charge of a small network of 9,500 km, with 165 toll stations and activity largely concentrated in the wealthy regions of the Mid-South. In 2004, the federal government’s projection for future tenders for private initiative was only seven stretches of road, with a total extension of 2,600 km (Afonso et al., 2005). Public expenditures in the area show the greatest discrepancy of all areas between monies authorized and effectively appropriated. The difference can be explained by impoundment of resources by the Executive branch and by the use of resources earmarked for transport for funding current expenditures and/or payment of interest on the public debt.

²⁰ CIDE stands for *Contribuição de Intervenção no Domínio Econômico- Combustíveis* (contribution for intervention in the economic domain for fuels).

In the wake of the Asian and Russian crises and the devaluation of the *real* in 1999, the Cardoso government announced a host of measures to increase the primary surplus. It was in this context that the federal government proposed constitutional amendment n. 277/2000, calling for changes in articles 149 and 177 of the Constitution in order to create the CIDE. This contribution was designed to equalize the price of domestic and imported fuels, thereby stabilizing the gasoline market, and not to increase revenue. The proposal was approved in December 2001 as Constitutional Amendment 33. Law 10.336 subsequently provided the enabling legislation for CIDE. The contribution was to be collected in import and commercialization operations of oil and its derivatives (cooking oil, naphtha and gasoline) as well as ethanol.

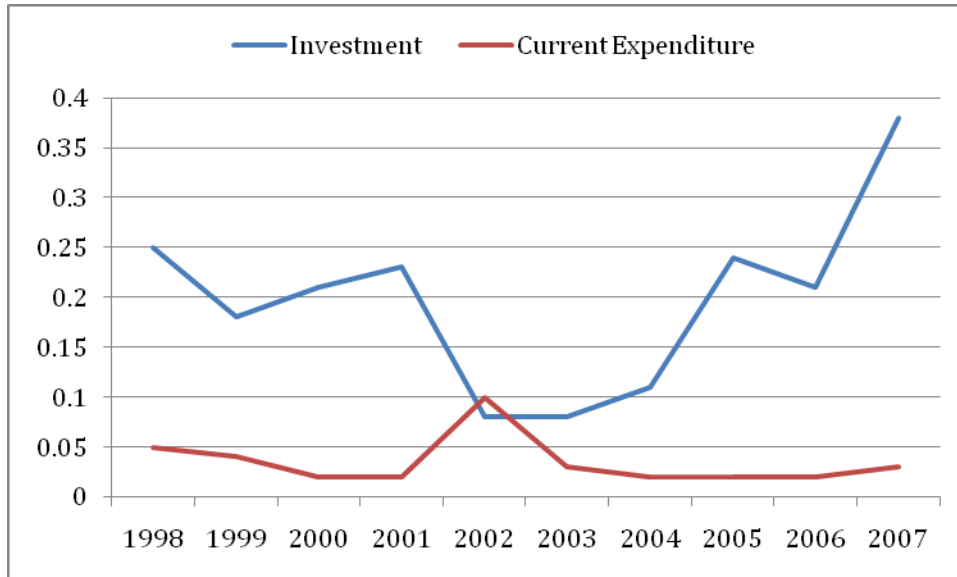
It should be mentioned that the choice of a *contribuição* – as opposed to a normal tax – is dictated by fiscal necessities. Contributions, which have been used mostly to fund social expenditures, are not shared with states or municipalities. Thus, when creating a *contribuição*, the federal government is able to capture all of the revenue. In addition, *contribuicoes* are not subject to the constitutional principle of anteriority—they can be collected in the same year of their legal establishment. Moreover, they are cumulative and therefore can yield great revenue even at low rates, which makes them politically palatable to taxpayers.

During the legislative discussion of the proposal in the Congress, legislators, fearing that CIDE revenues would not be used in the area for which they were earmarked, introduced a provision calling for the creation of a special monitoring group within the Standing Committee on Transport and Roads to evaluate the performance of the contribution—revenue raised and its effective use in transport infrastructure. The committee produced a more detailed proposal for enabling legislation that was approved as Law 10636 in 2002. The Executive, in consultation with the newly elected president’s transition task force, vetoed five provisions in the bill, which stipulated a narrower focus for the application of CIDE’s resources. One of these earmarked CIDE to the National Transportation Fund and another prohibited the impounding of CIDE’s funds. These vetoes guaranteed ample Executive discretion over the new contribution.

CIDE is a high productivity tax. It has consistently raised between 7 and 8 billion *reais*—equivalent to 0.3 to 0.4 percent of GDP. The application of CIDE resources underscores the dynamics of the earmarking game. Since 2002, the monies raised have not been fully invested. They are registered as *restos a pagar* (payments due in the accrual regime of public accounts) and are subsequently cancelled. They have contributed to the fiscal imperative. Figure 8 provides

data on public expenditures on transport infrastructure. In the first two years since CIDE's promulgation, public investment has actually declined despite the earmarked revenue for the sector. Only in 2006 did it return to its pre-CIDE level.

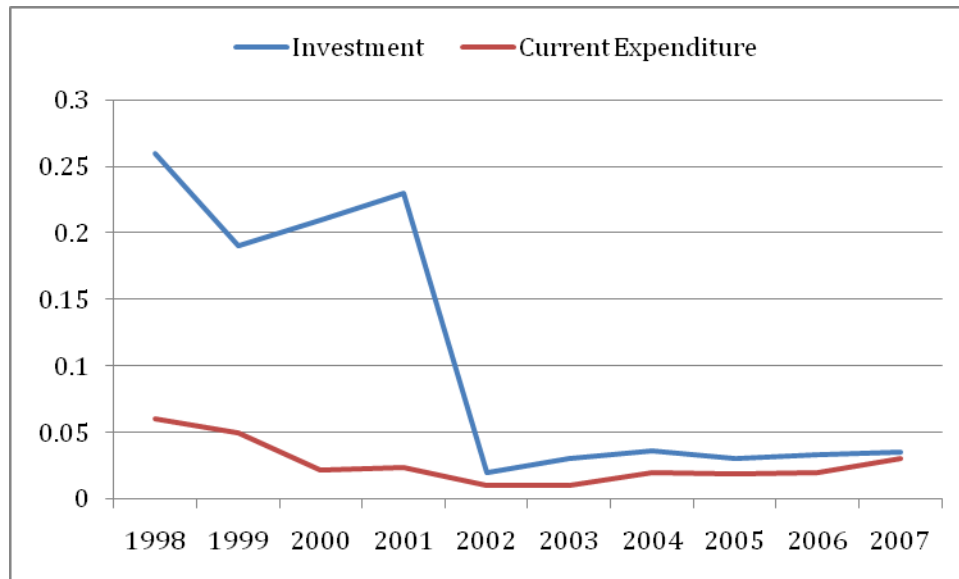
Figure 8. Public Expenditure in Transport Infrastructure % GDP



Source: Motta (2008), SIAFI, IBGE.

Figure 9 presents data on public investment in transport infrastructure from all sources except for CIDE. The dynamics become clearer when the two figures are compared. They suggest a substitution effect in revenue source. Funds invested from sources other than CIDE have actually plummeted. Hardwiring therefore has not meant more resources for groups and organized interests because of its substitution effect. The upshot of this game is that the Executive enhances its leverage over the policy-making process and manages to secure its interest in the fiscal imperative.

Figure 9. Public Expenditure in Transport Infrastructure, All Sources except CIDE



Source: Motta 2008; SIAFI, IBGE.

This hardwiring game has affected productivity due to its perverse sectoral impact. Most funds hardwired in the Constitution were in the social area, leading to a need to expand taxation in those areas. New democratic demands for social spending were heightened, generating the vicious circle of earmarking and expanding taxation mentioned above. This also led to a crowding-out effect on infrastructure funding. Interestingly, as the state of the country's infrastructure was increasingly seen as the major bottleneck to the sustainability of the export drive, new hardwired funds, such as CIDE, have been created. However, as discussed in Veloso (2006) and Motta (2008), this has not led to an increase in investments in the area; in fact, they have stagnated. The government strategically used interest groups that pressed for the introduction of hardwiring of transport infrastructure, as the issue has become increasingly salient in the public agenda.

Those who are losing the most from the existing bad infrastructure are the export sectors, as well as those sectors oriented to internal markets, logistics, and the transport sector in general. Bad infrastructure affects the key sector in the Brazilian economy, which is central to the current export drive, but the lack of investment in the sector also affects the interests of the powerful construction industry. These interests have reacted to the diversion of funds to other areas and/or stagnation of investments for infrastructure in various ways. At the level of policy formation, they managed to interfere with the content of Law 10636/2002. However, the government

managed to veto provisions in the bill that aimed to establish a tighter link between CIDE's funds and the sectoral interests in the transport sector.

At the level of implementation, several strategies have been attempted by the interests associated with the transport sector, including the creation of a monitoring task force within the Standing Committee on Transport and Roads. Other strategies have included the hiring of a consulting firm by the *Confederação Nacional dos Transportes – CNT* (National Transportation Confederation) to create a “thermometer” on the Internet for monitoring the application of CIDE's resources.²¹ In addition, these groups have resorted to the judiciary. Amid intense controversy over the diversion of CIDE's funds, the CNT filed suit in the Brazilian Supreme Court. In its *Ação Direta de Inconstitucionalidade* (ADIN 2925, of 14/07/2003)—Writ of Unconstitutionality—the CNT questioned the diversion of CIDE's funds for purposes other than transport infrastructure, including the government's debt payments.²²

In the wake of the increasing visibility of the problem, the attorney general has also denounced the government for diversion of purpose in the use of CIDE's funds. He also filed a writ of unconstitutionality in December 2007 (ADIN 3970). Finally, the *Tribunal de Contas da União* (the Federal Court of Accounts) undertook a special audit of CIDE in 2003 and has pressed for changes in government procedures. These conflicts suggest that the hardwiring game is not sustainable for the government. Its functionality is now at stake following greater public awareness of its underlying logic.²³

Hardwiring has been part and parcel of the political equilibrium described in Section 3. The hardwiring game has helped the government to pursue its fiscal imperative, which is positive for productivity. However, it has entailed measures that are detrimental to productivity in the short term, such as the crowding out of public infrastructure investment. While we conclude that the trade-off is on net positive, there is increased evidence that the hardwiring game may not be politically viable in the near future, as illustrated by the case of CIDE. The vicious circle of earmarking resources and attempting to hardwire the resulting funds has increasingly lost part of its opacity.

²¹ “CNT quer fiscalização no uso de verba da Cide,” *Valor Economico*, 24/03/2004.

²² Cf. <http://www.senado.gov.br/sf/senado/advocacia/pdf/ADI2925.pdf>

²³ In addition to these actors, states and municipalities pressed for a share of the new contribution. The government used the sharing of CIDE's funds with municipalities as political currency in the passing of the mini-tax reform in 2002.

Social actors are increasingly aware of the costs and benefits involved. The federal government has come to be seen as benefiting the most from the hardwiring game. Despite increasing activism by organized interests, the federal government has been able to impose its agenda. The CIDE controversy underscores among other things the fragmentation of the interests around the transport sector. The hardwiring game will not be necessary when the nominal deficit is zeroed and this possibility is not out of the picture in the near future due to the cumulative effects of a succession of primary budget surpluses. However, the fiscal adjustment has taken the form of compression of public investment and tax hikes rather than cuts in the government's current expenditures. As discussed in detail before, this has important consequences for productivity. The tax burden is also another key variable. At 38 percent of GDP, it may have reached its political limit, as evidenced by a host of episodes where the government has been defeated in legislative battles. The most prominent of these was the elimination of the contribution paid over financial transactions (CPMF) in 2007.

The extensive use of hardwiring and the vicissitudes around the hardwiring of funds for infrastructure may suggest that the country is a high transaction cost environment. It is important to distinguish the constitutional hardwiring that the country inherited, whose legacy marked the 1990s and 2000s, from post-constitutional hardwiring. Much of the political disputes around the constitutional hardwiring involved de-hardwiring in the 1990s. In this process, as documented in Alston et al. (2005a), the federal government has been highly successful, particularly when it comes to fiscal federalism issues. It has been much less successful in the area of entitlements as a result of the combination of the Supreme Court's upholding of social rights and of the average voter's strong preference for such rights. The very nature of entitlements makes them universally difficult to change.²⁴

The post-constitutional hardwiring in the areas of education and health in the 1990s may be interpreted as a consensus among social actors on its desirability. The same applies to infrastructure in the 2000s. However, it conflicts with the fiscal imperative. Torn between constituency pressures and the government's official line, many legislators have wavered and have sided with the opposition. The government has managed to impose its fiscal preferences while at the same time attempting to control the political damage of "loss imposition" on

²⁴ Contributors to the literature on the politics of social security entitlements have recognized their special characteristics, which prompted the use of the concepts of "politics of loss imposition" and of "policy-making by stealth" (Arnold 1998).

unpopular policies. We should not lose sight of the forest for the trees: the Executive's ability to impose its preferences has diminished but, with the exception of a few instances, has remained relatively unscathed. The coalition has been less able to secure its position when the president's popularity declines and in more salient issue areas. Some of the positive gains associated with fiscal austerity may already have offset the political costs of imposing austerity. For example, over time the public's perception of the gains from fiscal stability has increased.²⁵

4.3 The Case of the Supplementary Healthcare System

In this section we describe the creation of the National Supplementary Health Agency (ANS), an independent regulatory agency established in 2002 to regulate the private health insurance market. This is a case in which a wide array of interest groups mobilized to pursue their interest in the legislative process of designing the agency's mandate, structure, and process. The changes that were being instituted through the new legislation had the potential to greatly affect the fortunes of these groups. Although much was at stake, fragmentation among the interest groups prevented a coordinated effort and allowed the president to impose his preferred agenda, with important impacts on the subsequent functioning of the sector.

The first initiative to regulate the private health insurance market took place in 1994 through a bill that mandated insurance companies to cover specific medical and hospital expenses. A special committee was created to discuss the proposal, but after one year of work and numerous public hearings, including representatives from practically all interest groups, it failed to come up with a final report. The decision concerning the new regulatory system of the supplementary health market was thus delegated to the floor of Congress.

Two factors hindered the committee's efforts. First, the participation of union leaders and the social movements (the so-called *movimento sanitario*), who strongly opposed the private health sector, was very weak. Second, representatives of different interest groups of the private sector (e.g., private health insurance, medical cooperatives, sole practitioners, and philanthropic organizations) acted in a very fragmented, diffuse, and competitive way in the legislative arena. Each individual sector sought to achieve special treatment under the new law, which led to a competitive legislative battle. According to Deputy Ronaldo Cezar Coelho (PSDB – RJ), leader of the government in the Chamber of Deputies:

²⁵ The current crisis has changed the structure of the hardwiring game and the political equilibrium because austerity policies have been abandoned and replaced by fiscal expansionism.

While the special committee supported the idea that all private groups should be treated in the same manner, the interest-group representatives of different private sectors wanted to differentiate themselves, arguing for special treatment. It was common to see these sectors offering an excuse such as “I am a philanthropic, I am UNIMED (medical cooperative), I am this, I am that...”

A similar view was offered by Deputy Humberto Costa (PT – PE):

... it was the incapacity of the supplementary private sectors to cooperate supporting a common agenda that allowed the advancement of the regulation of the private health market. Actually, by betting on their expectations that the status quo would prevail and no regulation would take place, the supplementary market of health provision lost its capacity to develop collective action opposing the regulation.

Overall, the main players and interest groups that represented the supplementary private health insurance market not only acted in a fragmented way but also alternated their positions during the process. This ambivalent behavior was one of the factors that complicated the development of organized and unified collective action by the sector. While the special committee did not produce a final report, consumers’ dissatisfaction increased dramatically. The most common complaint was against price increases and coverage restrictions. Some consumers also took their complaints directly to the courts and at times succeeded. The actions of consumers put pressure on the Executive to solve the problem. As a result, the regulation of the supplementary health market became one of the top issues on the Executive’s agenda. It was clear that the current dual design, having the Secretary of the Ministry of Finance (SUSEP) responsible for economic aspects, and the Health Ministry responsible for technical issues, was no longer effective. Almost all players considered this dual model inefficient.

The president put pressure on Congress to speed up the passage of the bill creating the ANS. The Executive also threatened to regulate the private health market through provisional decrees if Congress continued to postpone action. This threat prompted fear among private health companies that regulation by the Executive would be more comprehensive than a law emanating from Congress. In response to the threat of executive decrees, Congress approved unanimously,

by a party leaders' agreement, a report produced in less than 15 days by an informal committee. The approval of this bill in record time surprised representatives of the private sector who were betting on the status quo as the outcome. According to Deputy Ronaldo Cezar Coelho, "when the fragmented private sector realized that the informal committee was working against their preferences, it was too late to oppose it."

Formally speaking, the ANS was created as an independent regulatory institution directly linked to the Health Ministry via provisional decree but *de facto* the Executive held the agenda-setting power. The Executive's powers were particularly effective in the case of the ANS because of the degree of fragmentation of organized interests in the supplementary market of health services and insurance. The lack of organization and a common agenda among the representatives of the private sector impeded the blocking or offering of an alternative agenda to that of the Executive. With the creation of the ANS, the regulatory activities were unified in one single agency thus replacing the dual model that generated conflicts between the economic and health ministries. In addition to political autonomy, Congress delegated financial autonomy to the ANS, including the capacity to obtain funds from fines and fees.

The performance of the sector in the eight years since the creation of the ANS suggests that the changes imposed by the Executive have been generally positive. Santos et al. (2008) show that competition has gone down, improving the quality of the participating firms as indicated by solvency and revenue. The fact that a large increase in new clients has accompanied these changes suggests that the reduction in competition has not been welfare reducing, but rather productivity enhancing.

5. Conclusions

This report investigated the impact of political institutions and the policymaking process on productivity in Brazil. Most of the literature that analyzes productivity in Brazil relies on the neoclassical growth model and is generally based on aggregate measures of output, capital and labor. We took a different perspective by emphasizing the links between specific characteristics of the policymaking process and the productivity of specific economic actors and economic relationships. By doing so, we could then determine whether or not the constraints and incentives that emanate from the policymaking process are conducive to higher productivity.

As we have argued elsewhere, the key to understanding Brazilian policymaking is the predominant role of the national Executive in the governing process. We maintain that, since the critical juncture of the Real Plan in 1994, the president has had economic and political incentives to pursue economic stability through fiscal and monetary policy, with a long-term view toward assuring balanced and sustainable economic growth. Saying that the Executive is the dominant player does not mean that the Executive can do whatever he prefers under any circumstances. Several political players (Congress, the political parties, the Judiciary, public prosecutors, governors, audit courts, etc.) exert important checks on the dominance of the Executive. While some of these checks reinforce the president's commitment to the fiscal imperative, and consequently to productivity-enhancing policy, others buttress entitlements and behaviors that are productivity-reducing. Our assessment is that the net effect of these opposing forces has been positive. While this is an evaluation based essentially on only two presidents (Cardoso and Lula), it covers a period of nearly 15 years. Indeed, the fact that both Cardoso and Lula are two-term presidents is a testament to their prudent macroeconomic policies overall.

In addition to those institutional checks, interest groups also play an important role on productivity. However, we demonstrated that interest groups are organized in a way in Brazil that mitigates their potentially negative impact on growth and productivity, especially compared to other countries in Latin America. We take Hausmann's (2008) claim that an overburdened state resulting from the constitution of 1988 is the key root cause of current low growth in the country. Unlike Hausmann, however, we emphasize the political determinants of these constraints and stress benefits in terms of macroeconomic stability that are derived from the way the government reacts to those constraints.

In Brazil, interest groups are fragmented and there are no powerful associations encompassing the interests of business. The decentralized institutional features of the political system (proportional representation, federalism, independence of the judiciary, etc.) and the existence of many entry points for business create incentives for particularistic demands targeted at specific institutional actors. Interest groups, therefore, are usually formed along sectoral lines, and no encompassing organizations have developed.

The lack of powerful associations and the fragmentation of organized interests in Brazil have three major implications. First, they help mitigate the capture of the state by business and the potential for productivity-diminishing policies. Second, they lower the political costs of

governing and enhance the ability to impose losses on key business constituencies, as illustrated by tax policy initiatives in the last decade and a half. Third, they give policymakers in the Executive the upper hand in its relations with business and its representatives in Congress. One of the key assumptions of our framework is that interest group fragmentation has been instrumental in the Executive's success in imposing its political and economic agendas. This is not to say that business sectors are the key losers. While some sectors are negatively affected, they still reap the benefits of stabilization. The net effect in fact depends on the sector and on their varying ability to access BNDES funds and to benefit from monetary stability, among other factors.

Although presidents have been successful in implementing their agendas, the political equilibrium we describe has been functional but is clearly suboptimal. First, the fragmented nature of business interests precludes first-best cooperative arrangements involving encompassing organizations, as illustrated by the historical record of many countries. Public-private cooperation is often governance enhancing and can play an important role in improving productivity. We claim that presidents in Brazil have had the incentives and institutional capabilities to pursue sound macroeconomic policies and have not been captured by the interests associated with individual business groups or sectors. This has leveraged the autonomy enjoyed by the public bureaucracy. The relatively high level of professionalization of the bureaucracy has guaranteed some degree of rationality in macroeconomic policy-making, but we do not claim that this is a first-best solution.

Second, the relatively low political transaction costs that result from existing political institutions have allowed the Executive to successfully pursue improved macroeconomic stability and fiscal sustainability. Although the fragmented nature of interest groups has to an extent insulated the Executive from those pressures, key constituencies have entrenched themselves in the state apparatus to capture entitlements. Maintaining fiscal balance has thus required an emphasis on increased taxation rather than expenditure cuts. The fragmentation of business groups has made them unable to counter this taxation, although subsidized credit from the BNDES offers some relief.

Two case studies provided evidence of the limited impact of interest groups: the hardwiring game in the infrastructure sector and the regulation of the supplementary health system. In the infrastructure sector, we found that while organized interests were able to

hardwire expenditures when the “constitutional window of opportunity” was open and had mixed success in resisting expenditure cuts that affected them, they were also unable to offer effective resistance against tax burdens. CIDE exemplifies this outcome. Since 2002, the monies raised from taxes have not been fully invested, which is consistent with the fiscal imperative. In the regulation of the supplementary health sector, the degree of fragmentation of the regulated firms helped the Executive to approve its agenda of creating an independent regulatory institution despite opposition from the sector. With regulation, the number of beneficiaries and the financial conditions of the regulated firms improved considerably, although it created a higher barrier to entry for new firms.

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