

# THE JAMES A. BAKER III INSTITUTE FOR PUBLIC POLICY OF RICE UNIVERSITY

# CRITICAL ISSUES IN BRAZIL'S ENERGY SECTOR

THE LONG (AND UNCERTAIN) MARCH TO ENERGY PRIVATIZATION IN BRAZIL

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## Introduction

In May 2001, the Brazilian government issued a warning that an ongoing drought had reduced reservoir levels to the point that the country's electrical energy supply -- over 90 % of which was hydroelectric in origin -- faced significant short falls. To prevent large-scale blackouts, the government ultimately imposed stiff rationing requirements for both residential and commercial customers. Lighting for city streets and public monuments was turned off at night. Customers were required to cut consumption 20 % below the previous years' usage, or face sharp fines. Ultimately, levels of compliance were high and the stern measures successfully prevented the kind of rolling blackouts Californians suffered. But, the crisis wiped out expected GDP growth of 4 % and cost the country U.S.\$ 10 billion (Brazil Focus, February 22, 2002). Meanwhile, President Fernando Henrique Cardoso's popularity suffered in the lead-up to the October 2002 presidential elections, and although the government actively blamed the situation on the lack of rain, a large majority of the population blamed the government itself (Brazil Focus, November 30, 2001).

The drought was certainly a factor in Brazil's short-lived, but acute energy crisis. But, the populace was correct in its skepticism. In fact, analysts, observers, industrialists, and even members of the government had been predicting serious shortfalls from at least the early 1990's (Kingstone, 1999). All these commentators shared a common concern: the level of investment in the energy sector could not keep pace with the trend of rising demand for electricity, estimated at roughly 6 % per year through the 1990's. The decline in investments stemmed directly from the state's precarious fiscal position from the early 1980's on and the fact that all segments of the energy sector were dominated by state-owned industries (SOEs). SOE domination of the sector, from electricity generation, transmission, and distribution to oil and gas, was maintained with strict constitutional limits on the participation of private capital. Therefore, the solution, according to most observers, was to inject private capital into the sector either through liberalization of the rules governing the participation of the private sector and/or through privatization of state owned enterprises. Thus, the drought over the last years of the 1990's may have acted as the immediate trigger for the crisis, but it was a long-anticipated crisis.

If so many observers were aware of the problem years in advance, why wasn't it addressed in time? The answer lies in two factors that are fundamentally important to understanding the development of the energy sector in Brazil. The first issue is the challenge of privatization in Brazil. Brazil followed an inward-oriented, state-led model of development that began roughly in 1930. The economy registered phenomenal successes between 1930 and at least 1980. Thus, abandoning the model of development required a significant shift in thinking among policy and business elites. The problem was compounded, however, by the fact that a large number of important constituencies had come to benefit from the state-led model. Therefore, the shift to a more private sector led model also had to confront political opposition from those who preferred the *status quo*. Privatization found opposition among labor unions, left-wing parties, industrialists who benefited from the SOE, in some portions of the general public, and within the SOEs themselves. The most critical opposition, however, came from within the political system -- both within the bureaucracy and among government allies in congress.

The second issue concerns the opposition within the political system and the way Brazil executives must operate to overcome it. The Brazilian political system presents something of a paradox. On the one hand, the system concentrates a great deal of power and discretion in the executive, leading to occasional accusations of a "hyper-presidency." On the other hand, the system also creates multiple "veto gates," or points at which policy can be blocked by the system's many "veto players," i.e. actors with power and/or opportunities to block policy. Thus, the Brazilian system creates a strong president, but also multiple opportunities for opponents to organize resistance against them. The two factors together explain Brazil's development path since 1990: a long, slow and ultimately uncertain march toward privatization and private sector led growth.

This paper examines the energy sector in the context of resistance to privatization and the efforts of successive presidents to overcome it. The paper is divided into six parts. The first part reviews the origins of Brazil's development model and the evolution of state owned enterprises as both economic and political agents in the country's political economy. It also reviews the economic crisis that hit Brazil by the early 1980's and set the stage for a shift towards privatization and greater market-oriented development. The second section examines the

functioning of the political system and identifies the main obstacles to policy making as well as the executive's principal sources of political power. The last three sections consider in greater detail three key areas of privatization. The first of them looks at the "flexibilization" of Petrobrás and the prospects for future privatization. The second reviews the progress of privatization in the electricity sector and the remaining challenges. The third considers the problem of establishing effective regulatory frameworks in Brazil and considers the energy-related agencies specifically. Finally, the conclusion reviews the prospects for further privatization and market oriented reforms in Brazil following the October 2002 presidential elections. The paper argues that the energy sector in Brazil is in transition -- no longer state run, but not fully privatized or truly liberalized either. The uncertain future of the sector lies in the hands of the new government.

# The Origins of the State-Led Model of Development

Brazil's state-led model of development emerged as an *ad hoc* response to the Great Depression, only later acquiring a theoretical underpinning and a well-defined political support coalition. Prior to the onset of the Great Depression, Brazil, like most other Latin American nations, relied on a liberal, trade-oriented economic model. Some small-scale manufacturing existed, primarily textiles, apparel, and tools and largely concentrated in and around São Paulo and Rio de Janeiro (Baer, 1995). The real core of the Brazilian economy came out of commodity exports such as mining, dairy, sugar, and most importantly coffee. Each of these commodities was produced in different regions, each one dominated by a different local oligarchy. Brazilian politics worked as a compact among the different regional oligarchies in which the presidency rotated among the dominant regions (Skidmore, 1967). The weak central state relied heavily on export taxes, but in general had little policy influence on the regions. States pursued their own development programs and even maintained their own state militias. Thus, the pre-depression era state lacked the capacity, inclination or plausible political coalition in favor of a more interventionist economic program.

That changed with the onset of the Great Depression. A variety of emerging social and political tensions culminated in contested presidential elections in 1930. The contest was between the

status quo candidate on one hand and Getúlio Vargas -- a candidate representing a diffuse coalition of every disaffected group in Brazilian society. That included junior military officers, middle class political liberals, marginalized regional oligarchs, and the small working class. The challengers lost the election, but refused to accept the results. The critical blow to the regime, however, came as the effects of the Great Depression helped push key regime supporters into the opposition camp. The critical defections came from the coffee oligarchs and the senior military. The coffee oligarchs broke with the regime because incumbent President Washington Luis refused to abandon the government's liberal, non-interventionist policy. In particular, the depression induced crash in coffee prices led to demands for price supports. President Luis refused. Moreover, the President also refused to abandon the free convertibility of the currency, the *mil reis*. The subsequent run on the currency quickly pushed Brazil to the brink of a balance of payments crisis. With the challengers in open revolt and the loss of support from the coffee growers, the senior military called on President Luis to resign in favor of the challenger, Getúlio Vargas. With the backing of both regime challengers and its former backers, Vargas assumed the presidency in 1930 (Skidmore, 1967).

Vargas' central political challenge was to construct a stable coalition out of the diffuse supporters of the regime change. His first steps were to abandon the convertibility of the *mil reis* and to establish commodity price supports through a series of government purchasing agencies. Price supports and controls on exchange protected purchasing power, but restricted access to imported goods, the supply of which had in any event become more unreliable between the depression and later World War II. The combination produced incentives to begin manufacturing locally to substitute previously imported goods. Regardless of the economic wisdom, providing capital to finance local manufacturing proved good politics. Ultimately, the state entered the business of producing in areas where very high capital requirements and high levels of risk discouraged or prohibited private investment. Thus, over the 1930's and into the 1940's, the state increasingly became involved in producing basic inputs such as steel, aluminum, and electricity.

Turning to a more interventionist economic program allowed Vargas to strengthen and centralize state control of the economy and to forge a stable coalition behind his economic program. Vargas used this program to channel benefits to the growing business and middle classes, to a

military interested in modernization, to the working class, and to oligarchs through price supports and preservation of essentially feudal social relations in the countryside. Over the course of his rule from 1930 to 1945, Vargas consolidated this primarily urban coalition in favor of what later came to be known and theoretically justified as *import substitution industrialization* (ISI).

There were several basic elements of the model. First, industrialization depended primarily on subsidized capital to domestic producers to substitute locally manufactured goods for imports. Domestic producers were then protected from import competition by both high tariff and non-The combination led to inefficient producers who worried little about tariff barriers. competitiveness or innovation. But, the policy allowed industrialists to extract substantial profits and pay high salaries (by developing country standards) only weakly connected to productivity and led to the growth of the developing world's largest industrial economy. The model also discriminated against foreign capital, through both restrictions on foreign investment and through preferential treatment of domestic capital (especially government contracts). Finally, the model relied on a large number of giant state-owned enterprises producing in critical areas of the economy, such as utilities. State ownership allowed these firms to play political and social roles in addition to economic ones. State owned firms typically employed far more labor than needed, subsidized prices for consumers, and provided a wide array of patronage opportunities for politicians. Thus, SOEs played a welfare role and a developmental role while also facilitating the pork barrel politics that became the essential grease of Brazil's political machinery.

The evolution of this ISI model did not occur without resistance. From its inception, some actors disagreed with some or all elements. Domestic businesses were divided over the degree of trade protection, with more liberal elements centered in Rio de Janeiro and more "developmentalist" (or "statist" or "nationalist") centered in São Paulo (Leopoldi, 1984). Tensions between workers and management grew more intense as inflation eroded profit margins and real salary gains. Commodity producers resented the way the model skewed benefits toward the cities at the expense of agriculture. Liberal economists and policy makers continued to argue against what they believed were the economic errors of the model (Sola, 1982).

Yet, by the 1950's, the ISI model had for all intents and purposes won out. Key government agencies had come to embrace developmentalist notions (Leopoldi, 1984). In particular, the antiliberal view took strong hold in Itamaraty, the Foreign Ministry, and of the National Development Bank (BNDES), the lead government agency in devising economic development strategy. The São Paulo based industrialists achieved primacy in policy-making circles. Even the military became committed to the vision of a grand state-led Brazilian development strategy ("grandeza"). ISI had become the dominant approach to economic development, regardless of regime or government (Gordon, 2001). Governments remained committed to it through the democratic experiment from 1946-1964, as well as through the military dictatorship, 1964-1985. It remained dominant even in the 1960's when new investment and political circumstances led to a renewed openness to foreign capital and intense repression of organized labor (Evans, 1979).

# The Collapse of the ISI Consensus

The fault lines in the support for the ISI model began to emerge by around 1980. By that time, Brazil's economic philosophy had attained some very significant accomplishments. Brazilian industrial economy, built on a "triple alliance" among local private, foreign private, and state capital, was unparalleled in the developing world and helped place Brazil's economy among the ten largest in the world. Brazilian SOEs ranked among the most impressive in the developing world. Firms like Telebrás, CVRD (Companhia Vale do Rio Doce), Usiminas, and of course Petrobrás, were jewels in the Brazilian state's crown. Nevertheless, the 1973 and 1979 OPEC oil shocks rapidly and painfully revealed weaknesses in the model. In particular, the country was highly vulnerable to inflation and balance of payments problems (Baer, 1995). After 1980, the military government increasingly turned to orthodox policies to contain inflation and to meet payments obligations. Brazil entered into a period that combined recession, constantly rising inflation, and rising budget deficits and balance of payment difficulties. Declining fiscal and balance of payments performance forced the government to squeeze Brazilian society harder to meet its payment obligations, which in turn alienated even the original supporters of military rule. It also provoked the first reflections on the continued value of the ISI model.

One of the most critical sources of opposition to military rule came out of the "new labor" movement, centered in the industrial areas of greater São Paulo and led most visibly by Luis Inacio Lula da Silva (Keck, 1989). The military dictatorship had repressed labor organization as part of their effort to contain wage demands and create conditions for accelerated state-led growth. By the late 1970's, new labor leaders emerged among the metal bending industries. This new labor movement quickly realized that basic bread and butter issues could not be resolved directly through confrontation with management as the state intervention of the Brazilian ISI model filtered down even to industrial relations. As a result, labor leaders confronted the state, both over democracy and over industrial relations issues under the ISI model. The labor movement focused on issues of democracy and equity. But their challenge to business and the state played an important role in forcing business to reconsider the model as well (Humphrey, 1982).

For business, the growing mobilization of labor coupled with the military's failure to manage the economy effectively provoked criticism as well. For members of the business community, three separate issues were salient. First, the business community sought immediate improvement in economic management and conditions. Business representatives sharply criticized what they saw as the government's inability to make sound economic policy (Frieden, 1991). In particular, the decaying economic conditions undermined the state's capacity to support domestic businesses. The business community relied heavily on the state for financing (at highly favorable rates) and for other subsidies. The crisis forced the government to withdraw many of the resources it had passed on to the business community (Kingstone, 1999).

The second issue was more fundamental. A growing number of leading business voices expressed concern over the actual ISI model (Lima and Abranches, 1984). This growing skepticism came as many businesses sought exports as a solution to domestic recession. Their export experience taught them that Brazil was beginning to lag significantly in technological development and competitiveness. The most articulate and influential of these expressions came from what was called "the democratic manifesto of the bourgeoisie." Eight of the most influential industrialists in the country published an open letter in the *Gazeta Mercantil* in 1978 calling for a return to democracy, but also discussing at some length their concerns that the ISI

model had run its course (Kingstone, forthcoming). Instead, these industrialists argued that a new developmental model needed to be elaborated, preferably through some sort of national dialogue, in which competitiveness, innovation, and distribution were emphasized. Other business protests came in the National Campaign against 'Statization' -- a business and intellectual attack on the trend toward increasing state ownership of large enterprises. This movement combined both liberal, market-oriented intellectuals and business people who felt threatened or crowded out by the growing state (Cruz, 1984).

Finally, business people increasingly called for democratization as well. Business leaders felt that the military government was not able to solve either the issue of labor mobilization or devising a new development strategy. Labor relations had been managed by the state since the reforms of Getúlio Vargas under a system called corporatism (Erickson, 1977). Corporatist arrangements organized both business and labor into state-sanctioned and monitored unions (*sindicatos*), and negotiated labor-management conflicts within them. By the early 1980's, many business people believed it had become necessary to negotiate directly with labor and that concessions and dialogue was the solution rather than coercion and repression. Similarly, business leaders argued that the kind of national debate necessary to re-orient the country's development strategy could not take place under military auspices. Thus, the business community increasingly called for a transition to democratic rule (Payne, 1994).

A third group was also beginning to question the ISI model. That group came out of the bureaucracy, most importantly among technocrats in the BNDES. Although the agency remained the center of ISI development philosophy, a minority view came to agree with the business perspective that saw Brazil beginning to lag significantly in technological development and competitiveness. This group developed an alternative view they referred to as "competitive integration" (BNDES, 1989). Competitive integration did not embrace liberal, free market values. Instead, this view argued that Brazil needed to integrate itself more fully in the global market, but it had to control the terms of that integration. This group argued that ISI had achieved its aims of developing a large, competitive domestic industry, but that the model had run its course. The goal then was to scale back protection and state intervention and to increase the importance of private capital and market forces. To that end, competitive integration needed

to think strategically about which areas to liberalize and how to do so. In the early 1980's, this view was rejected within the mainstream of the BNDES. Yet, by the late 1980's and into the 1990's, it was to become the dominant understanding of Brazil's economic reform process and the guiding philosophy behind several market-oriented reforms, including privatization.

These many pressures, among others, ultimately helped produce a transition to democracy in 1985. The military's years of harsh austerity measures helped produce a somewhat better fiscal picture for the new democracy. But, the new democratic government quickly squandered that limited cushion. In fact, the new democracy almost immediately disappointed the many different hopes pinned on it. On the economic front, democratic rule led to a worsening of the budgetary situation with an accompanying worsening of both the balance of payments and inflation. Furthermore, the new government showed little concern with generating a new development strategy. The government produced an industrial policy that pointed toward privatization, trade liberalization, and generally scaling back government intervention. But in actuality, very little changed. Instead, the government focused on populist tactics to increase political support, tried (ineffectively) to manage inflation, and concentrated on lengthening the presidential term to five years from four (Kingstone, 2000). At the same time, the congress, acting as a constitutional assembly, actually deepened the country's commitment to the old ISI, statist, interventionist model. The 1988 Constitution enshrined a vast array of expensive social rights, created substantial rigidities in the labor market, set limits on interest rates, discriminated against foreign capital, and codified the role of SOEs in strategic areas of the economy, primarily in utilities and mining. The last element was particularly difficult as it made it impossible to open sectors like telecommunications, electricity, or oil to private capital -- foreign or domestic -- even though the state's capacity to invest in these areas was visibly disappearing by the late 1980's (Payne, 1994).

For the business community, the Constitution and the growing economic chaos were sufficient to break any remaining support for the ISI model. The fiscal situation had made the state's role in the economy destructive. State agencies appeared corrupt as access to scarce state resources became ever more politicized. State owned enterprises had several perverse effects. As customers, SOEs were frequently accused of defaulting on payments, or paying very late (which in a high inflation environment could be as bad as not paying). As a provider of basic inputs --

especially in utilities -- the inability to invest undermined performance and affected systemic competitiveness. For example, pulp and paper producers -- possibly Brazil's most competitive industrial sector -- expressed deep concerns about the electrical power supply as early 1989-1990. As a result of the state's destructive effects on the economy, business groups increasingly called for a reduction of the state's role in the economy. These were not ideological liberals. Business groups had turned away from state promotion and protection for the simple pragmatic reason that the state had lost the capacity to do either (Kingstone, 1999).

Leading segments of the bureaucracy also moved away from support for ISI. In particular, the BNDES had come to adopt "competitive integration" as its dominant philosophy and had begun Brazil's first privatization program, albeit a limited one. Privatization was driven almost entirely for pragmatic reasons (Schneider, 1990). The BNDES was the key source of investment for industry in Brazil. Through the 1980's, the BNDES - through its financing arm, the BNDESPAR – had acquired control of insolvent private firms. These firms had become nationalized through a process sometimes referred to as the "hospital for firms." Unfortunately, they also ended up consuming larger and larger shares of the BNDES' resources. Thus, the limited privatization program was intended to recover the investment capacity of the bank (Velasco, 1999). Beyond this limited sale of state assets, the bank had come to believe in a larger scale privatization as well. This more ambitious privatization was also driven by pragmatic goals. The bank argued that privatization had several benefits. First, the sale of SOEs was necessary to restore the state's overall fiscal health. Second, privatization was necessary to restore investment in key areas of the economy that affected the country's competitiveness (Schneider, 1990). Utilities, infrastructure and basic inputs such as steel were all areas that needed significant increases in investment, but the state's fiscal crisis prevented it from performing that function. Privatization promised to restore investment capacity to those crucial areas. Finally, BNDES officials argued that privatization was a potentially effective mechanism for promoting competitiveness (BNDES, 1991). Thus, it was argued that private ownership and management could transform inefficient, but potentially highly competitive, SOEs into sleek, modern, productive sectoral leaders. But promoting this more ambitious program would require both a change in leadership and an executive who could manage Brazil's complicated and challenging institutional environment.

## The Institutional Bases of Brazilian Democratic Politics

Brazilian political institutions have been the subject of intense scrutiny by academics and policy makers. Both scholars and practitioners have argued that Brazil's political system is unusually unwieldy. Although the Constitution grants the president certain extraordinary powers, other aspects of the system diffuse influence so widely that policy making frequently ends up involving negotiations with many different political actors. The political system grants these many political actors opportunities to block legislation. For that reason, political scientists have dubbed them "veto players." The more veto players that can and do participate in decisionmaking, the greater the number of barriers to effective and expeditious policy making. Similarly, the system creates multiple points where decisions may be blocked -- or "veto points" or "veto gates." The larger the number of veto gates, the more difficult and uncertain is the policy making process (Ames, 2001; Haggard and McCubbins, 2001). Again, the Brazilian system stands out for the large number of veto gates. Thus, understanding the politics of privatization in Brazil requires understanding how the system creates obstacles and the ways presidents can try and get around them. The discussion that follows first examines the factors that hinder effective policy making and then examines the mechanisms available to presidents to overcome those hindrances.

## Fragmentation of the Party System

Probably the most obvious obstacle to easy policy-making is the fragmentation of the party system -- or more simply, the large number of parties that effectively compete for power. As many as 10-15 parties with realistic chances of winning seats may compete in any given legislative election (Mainwaring, 1995). Many of these parties are small, but there are always at least five or six major parties that divide the majority of seats amongst themselves. The major parties range across nearly the full ideological spectrum of the Brazilian party system and therefore the room for cooperation amongst them is limited by the sharp differences in their program and philosophies (Bresser Pereira, 1996).

This large number of parties is partially a result of the democratization process and partially a function of the electoral system. Under the military dictatorship, the government allowed two parties to operate: a party of the government (ARENA) and an opposition (the Brazilian Democratic Movement (MDB)). The latter served as an umbrella for all opposition to military rule. Not surprisingly, once the military liberalized the political rules and permitted more parties to appear, the MDB splintered into multiple factions along ideological, programmatic, and regional lines. The intense fragmentation persisted (and for some years after 1985 even deepened) because of electoral rules that permit many parties to flourish. Among the several rules that contribute to that outcome, two stand out. First, Brazil elects its lower-house representatives through proportional representation (PR). That is, parties are allocated a share of seats in proportion to the share of votes it receives.

PR systems by their nature tend to permit a greater number of parties to survive than the most common alternative -- single-member plurality (or "first past the post") as is used in the United States. But Brazil's PR system exaggerates that tendency through a very low threshold for representation. PR systems typically establish some kind of floor to ensure that parties have some minimal representation before they get seats in the legislature. Brazil's threshold of 2 % of the vote is comparatively very permissive (Mainwaring, 1999). The second factor that encourages fragmentation is the size of the electoral district ("district magnitude") in which candidates run. Large electoral districts with many seats also encourage fragmentation of the party system as it becomes easier for smaller parties to carve out electoral niches or bailiwicks for themselves. Individual towns or neighborhoods, or particular organized groups -- such as labor unions, farmers, or even private hospital owners -- can elect representatives tightly linked to their particular interests (Ames, 1994; Ames, 2001).

Fragmentation complicates governing because it makes it much harder to construct legislative coalitions. Since 1985, no president has had a partisan majority in the legislature. Instead, each one has had to forge a coalition with several other parties—with varying degrees of success. President Fernando Henrique Cardoso (1994-2002) was considerably more successful than his three predecessors (Mainwaring, 1999). But there is no reason to believe that his successors, including the incumbent, Luiz Inacio Lula da Silva (Lula), will be equally successful. The large

number of parties and the programmatic and philosophical differences continue to be inherent features of the Brazilian system and therefore make forging a stable legislative coalition very difficult.

# Weak Party Discipline

Fragmentation complicates legislative coalition building, but lack of party discipline makes the problem enormously more difficult. In any party system, we can ask if the rules tend to make politicians more responsive to their constituencies (personalistic systems) or more responsive to their party leadership (party oriented). In the former situation, politicians advance their careers by cultivating personal followings -- loyal constituencies that will vote for them no matter which party they belong to or how their party performs in the legislature. For such politicians, the key to success is to be able to point to distinct legislative achievements and claim credit for them. Thus, delivering visible patronage goods, such as the construction of public works, to a town or neighborhood allows an individual politician to claim credit for the expenditure and to strengthen his or her following.

Or alternatively, backing policy positions that are important to a particular organized interest group that votes loyally for the politician can be a way to maintain political support, regardless of what the party leadership or the government prefers. By contrast, party oriented politicians depend on the active support of their party leaders and on the reputation of the party. For example, in such a system a politician that ignores the wishes of the party leadership may not be able to run on the party ticket. In such systems, party leaders typically have mechanisms of harming or blocking a politician's candidacy for the legislature. Politicians that depend on party reputation also have an incentive to work to improve the party's image in public because their electoral chances improve as the party reputation improves.

Personalistic systems complicate policy-making because they make it harder to establish stable legislative coalitions (Mainwaring and Shugart, 1997). Europe's multi-party, parliamentary coalitions work well because prime ministers can strike deals with party leaders and can be very confident that members of the party will toe the party line. Members that vote against their party leadership will lose their position in the party. In personalistic systems, deals among party

leaders are much less reliable. Executives can not be certain that members will follow any agreement reached by leaders as individual politicians have much stronger incentives to satisfy their voting bases -- regardless of its consequences for the good of the country or the quality of policy. As a consequence, executives in highly personalistic systems have to negotiate with many individual politicians in addition to party leaders.

Again, Brazil's system lies on the extreme end of the continuum. Brazil's electoral rules give party leaders very few levers with which to discipline their party members. Incumbent legislators have an automatic right to stand for re-election (the *candidato nato* rule), and the specific PR rules Brazil uses make parties more dependent on candidates who bring their own following than make candidates dependent on parties (Ames, 1995). One of the most important rules is that in the Brazilian system, the party's share of the votes in the district determines the number of seats it gets, but which candidates actually get a seat is determined by their own individual vote shares. In the disciplined, party-oriented systems among Europe's parliamentary regimes, the party establishes the order of candidates. The party's influence is a crucial factor disciplining individual politicians and pushing them to expand the party's representation.

By contrast, Brazil's legislators work to cultivate a personal following to ensure their election (Ames, 2001). They do that by protecting their constituency and/or by delivering benefits to them. Deals among party leaders and/or the preferences of the president matter very little if they conflict with the need to protect their voting base. As a consequence, presidents trying to forge a legislative coalition frequently have to enter into negotiations with very large numbers of legislators on every new piece of legislation (Mainwaring, 1999). These legislators are able to act as veto players, obstructing policy or demanding substantial changes as well as holding the government hostage to their demands for visible benefits to deliver to their voting base. This makes the policy making process in Brazil slow, unpredictable, and highly erratic.

# Fiscal Federalism and the Politics of the "Barons"

The last issue that affects the politics of privatization is the important role that the nation's governors ("the baron") play in Brazil. The governors' role in national politics is shaped by several factors (Abrucio, 1994). The first is the fact that the states are deeply implicated in

Brazil's fiscal difficulties. The 1988 constitution mandated a set of transfers from the federal government to the states and municipalities without accompanying spending obligations (Montero, 2000). The writers of the constitution did this as a reaction to the power of the central state under the military. Whatever the justification, the practical consequence was disastrous for the federal government's finances as the government lost revenues while maintaining the spending obligations.

Brazilian politics since 1988 has had to contend continuously with the problem of restoring the fiscal health of the state. To achieve that, successive governments have had to negotiate with the governors -- who unlike the president are able to rule their respective states with very little accountability or constraints on their decisions. As of 2003, the federal government still had not devised a permanent solution to the problem. Instead, the government has had to negotiate and renegotiate successive temporary "fiscal adjustments." The continuous renegotiations help preserve the governors' capacity to extract concessions from the federal government in exchange for temporarily giving up constitutionally mandated transfers.

In addition, state governors have been able to exert considerable influence on the federal legislative caucus from their own states (Abrucio, 1994). Governors have two sources of influence over legislators from their states, regardless of party affiliation. First, every legislative election features large numbers of politicians who seek office as municipal mayors and, to a lesser extent as governors. Roughly one quarter to one third of legislators at each election pursue this career track and as a result, legislators tend to be very sensitive to issues that affect the status of state and local executives. The second reason is that state governors are able to generate patronage resources to support electoral careers in their state. Their ability to provide these resources to patronage dependent politicians gives them considerable influence over their voting behavior in the federal legislature. This ability to affect behavior means that governors frequently appear as "veto players" in federal policy making, even in areas where the federal constitution does not directly implicate them. In short, the power of the governors adds another layer of negotiation and potential "veto gates" to an already complicated bargaining environment.

# Presidential Mechanisms for Overcoming Policy Barriers

The discussion above points to the way the Brazilian system expands the number of veto players and veto gates in policy making, but Brazilian presidents are not helpless in their efforts to manage the process. There are three basic mechanisms whereby presidents try to limit the scope of negotiation. The first is through the distribution of cabinet posts among parties allied, more or less formally, with the government. Many, if not most, cabinet posts offer opportunities to manage substantial patronage resources. Therefore, controlling cabinet positions is a considerable enticement to party leaders and presidents distribute them with an eye toward securing support in the legislature (Figueiredo and Limongi, 1999).

Certain ministries, such as the Foreign Ministry, or Finance, are usually reserved for individuals with strong technical credentials. But others like Mines and Energy, Communications, or Social Security offer parties influence over the allocation of vast resources. This is not a foolproof method. As noted above, party leaders still may not be able to ensure the loyalty of party members. Furthermore, presidents have been reluctant to take positions away from particular parties once an agreement over the division of posts has been reached. As a consequence, presidents cannot always guarantee that cabinet ministers will loyally advance the president's agenda. Nevertheless, the use of cabinet positions remains an important mechanism for forging legislative support.

A second critical mechanism of control that presidents can use lies in the nature of the budget process. Like most presidential systems, the power of the purse resides in the congress. It is the congress that writes and passes the budget, although the president may signal its preferences. The congress typically adds thousands of amendments that allocate patronage resources for their constituencies. These expenditures are an important part of how politicians cultivate and maintain their personal followings (Ames, 2001). Yet, once the congress passes the budget, the actual authority to disburse those funds resides in the executive. Thus, the president can hold legislators' pet spending projects hostage to his need to craft coalitions behind his policy initiatives (Figueiredo and Limongi, 2000). This is a particularly powerful tool for presidents to discipline members of congress. It is not a perfect tool. Most importantly, once a president

concedes, he loses that leverage. But presidents are often able to negotiate support on critical items, even though less central policies may suffer.

The final mechanism that Brazilian presidents may use is executive decree authority (Power, 1998). The Brazilian constitution grants presidents the right to issue decrees (*medidas provisôrias*) that have the force of law for 30 days. The congress has 30 days to consider and vote on them. If after the 30 days the congress has not acted, the decree expires. These decrees are a highly controversial source of presidential authority. Members of congress have complained bitterly that presidential reliance on them usurps legislative authority and ends up dominating the legislative agenda. In response, successive presidents have argued that the decrees are a necessary policy making tool in Brazil's slow and complicated policy making process. Each successive president has issued hundreds of them, many times re-issuing decrees that lapsed due to inaction. Ultimately, their effectiveness as a tool is limited in that the congress must eventually vote to turn them into law. But their use and the struggles with the congress over their use provide presidents with considerable policy making and bargaining power.

These are the factors that shape how policy is made in Brazil since the start of the New Republic in 1985. The Republic's first four presidents managed this dynamic very differently. The first president, José Sarney, was exceptionally ineffective and probably defined a low end for what this system can produce. By contrast, Cardoso was much more effective, but probably defined the high end of what this system can produce. The election of Lula as the new president in October 2002 has important consequences for the future of Brazil's privatization program. For the foreseeable future, the new government will be straddling the conflicting objectives of reducing poverty and averting a financial collapse. This will also be the backdrop for the politics of privatization.

#### The Slow Road to Privatization

Brazil's 1989 presidential election was a momentous occasion in that it was the first direct presidential elections conducted since 1960, following the adoption of a new constitution in 1988, and the first to allow a second runoff election for close races. The election featured a

number of traditional, well-known candidates and two relative outsiders. The traditional candidates offered little new or innovative on the economic front despite the evidence that Brazil was teetering on the brink of catastrophically bad results. The two outsiders offered contrasting programs. In the 1989 election, the current president, Lula, the leader of the new labor movement of the 1970's, presented a more or less Socialist vision of development based on nationalizations and state controls on private capital. On the right, Fernando Collor de Mello promised to turn Brazil into a sleek, modern corporate "Brazil inc."

Collor used populist, anti-elite rhetoric to attract low-income voters, but presented a strongly pro-market vision of the future. Collor's rhetoric is important to understand because it captures many of the elements inherent in the turn to public support for market reforms. Collor described the state as bloated, inefficient, and corrupt. He claimed that the bureaucracy was filled with nepotism beneficiaries, dubbed "maharajas" in Brazil because they drew riches without having to work. His pro-privatization television advertising campaign depicted the state as a slow, blundering elephant.

His imagery resonated with a public that did not understand the meaning of privatization or the significance of market oriented reforms, and in fact had not rejected the state-led ISI model. But polls did show that the public did understand corruption and inefficiency and associated it strongly with the state and with SOEs (Nóbrega, 1992). For example, in a 1988 poll, respondents expressed dissatisfaction with virtually every major area of government services -- from social security to urban transport to the development of the oil sector. Only TV, radio and electrical energy received strong expressions of approval. With respect to state owned enterprises, only 15 % of respondents claimed that SOEs were the best-administered firms among SOEs, private domestic, and multinationals. Multinationals, by contrast, were identified as the best run firms by 36 % of the respondents. Virtually the mirror image view appeared when asked in which firms was there the greatest waste. Only 12 % of respondents saw multinationals as wasteful, while 37 % identified SOEs as wasteful. Respondents were asked to characterize private firms (foreign and domestic) and SOEs. The results were telling. Only 16 % believed that SOEs produced quality goods at good prices. Even fewer thought that state firms were efficient, productive or had a modernizing effect on the country.

Respondents did believe in larger numbers that SOEs had some positive aspects: roughly between one quarter and one third of respondents believed that state owned firms offered job security, and good salaries and working conditions. But even larger numbers (37 %) believed that these firms were centers of patronage employment and more than half (51 %) believed that SOEs were corrupt. By contrast -- and despite general suspicion towards business people in general -- the corresponding numbers for private capital were 8 % and 14 %. It is perhaps not a surprise then that more respondents (35 %) preferred to work in a multinational than either private domestic firms or SOEs. The effect was even stronger among the young, the better educated, and those from the more developed regions of the country.

But the shift in business attitudes and Collor's victory did not mean that the Brazilian populace fully embraced a change in the economic model (Schneider, 1991). Despite the public suspicion about the state and state-owned firms, large percentages still wanted the state to maintain an active role in the economy (Nóbrega, 1992). In response to a question about principal responsibility for investment, 42 % thought that the government should take the lead role while another 36 % thought the government should give incentives to private firms to invest in important areas. Only 17 % though the responsibility to invest should be left entirely in private hands. Similarly, 23 % of respondents thought the government should control the prices of a basic basket of goods while 60 % thought the government should control all prices. Only 11 % thought firms should determine their own prices. The public also believed that salary adjustments should continue to be the purview of the state (58 %) as opposed to the 34 % who believed that salaries should be determined in direct negotiations between workers and management. Finally, when asked specifically about the oil sector and its constitutional preservation as wholly state owned, 55 % agreed that it was proper. In this context, it is not clear how much importance to attach to the fact that 41 % of respondents claimed to support privatization against 29 % opposed to it. The ambivalence or ambiguity in public opinion was matched by attitudes in congress, where only 40 % of members of congress identified themselves as economic liberals while the remaining 60 % identified themselves as different variants of socialists (Power, 1998a).

The ambivalence toward market reforms meant that Collor faced a difficult situation. He had capitalized on strong sentiments against corruption, privilege, and inefficiency. He had astutely connected these sentiments to perceived abuses within the state. Yet his prescription for change did not have a solid support base. Privatization and other market-enhancing reforms still represented a significant shift away from majority preferences in society and in the congress. Collor's situation was further complicated by the worst inflation in Brazil's history, which forced him to subordinate all policy initiatives to stabilization measures. Finally, Collor's own defects as a leader contributed to his difficulties in advancing his agenda. Ultimately of course, the congress impeached Collor on corruption charges in December of 1992. Yet, by that time, Collor had firmly broken with the ISI model and had launched Brazil on a path, albeit an uncertain and erratic one, toward market reforms.

Collor was able to start the privatization process after overcoming substantial political opposition within congress, from labor unions, and from private firms that benefited from the state's role in the economy. Instead, Collor relied heavily on decree authority and tried as much as possible to rule without congress (Weyland, 1997). His early popularity granted him a short window within which to promote economic reform aggressively. Privatization, which was driven by the urgent need to address the severe fiscal imbalances left by Collor's predecessor, began under the aegis of "The National Privatization ("De-Statization") Plan prepared by the BNDES. Although Collor's style was unusually aggressive, technically inclined bureaucrats, especially within the BNDES, effectively designed the privatization to widen the scope of potential participants in the business community (Velasco, 1999). Their efforts helped establish a narrow, but stable coalition of privatization backers, and in fact a number of leading conglomerates (grupos econômicos), pension funds, banks, and private firms entered into the bidding on the early privatizations.

The first privatizations began in the steel industry, and then moved into petrochemicals. As neither of these areas required constitutional amendments for privatization -- and therefore supermajorities in the legislature -- the Collor team was able to limit the scope of debate about privatization and counter the maneuvers -- especially in the courts -- of opponents to the sale. Ultimately, Collor and later Itamar Franco, his vice president and successor upon his resignation,

privatized 33 firms, generating close to U.S. \$ 9 billion, almost entirely in steel, petrochemicals, and fertilizers. Collor's effort to amend the constitution, however, failed and as a result, he made no progress on privatization of constitutionally protected utilities, such as telecommunications, electricity, and oil. President Franco allowed firms slated by the Collor administration to be privatized, but his otherwise strong nationalist profile led him to drop the economic reform program.

Thus, the constitutional reform agenda was not taken up again until Fernando Henrique Cardoso won election in 1994. Cardoso had several advantages over Collor that allowed him to pursue privatization more aggressively. First and foremost, Collor had begun the process of market reforms, including privatization, and, in the process, had explicitly attacked and beaten back many of the most ardent opponents. Thus, Cardoso was able to continue a process that had already begun rather than make a fundamental break with the past, as Collor had done (Kingstone, 2000). Moreover, privatization appeared to have been a successful program from a point of view of efficiency and competitiveness. Firms like Usiminas and Embraer benefited noticeably from the change in ownership, with Embraer emerging as a singularly impressive success story (Pinheiro, 2000). Thus, Cardoso could point to the record of privatization and justify its continuation. Second, Cardoso benefited from a much stronger electoral alliance among the strongest center, center left, and moderate right wing parties. Fear of Lula pushed the non-Socialist forces together in the presidential election of October 1994. Thus, where Collor governed without a formal electoral or legislative coalition, Cardoso enjoyed both (Weyland, 1997). Finally, Cardoso, acting as finance minister in the interim government after Collor's impeachment, implemented one of the most successful stabilization plans in Latin American history. Under his guidance, the *Real* Plan brought inflation down from roughly 25 % per month in June of 1994 to roughly 2 % per month by the presidential elections in October 1994 (Baer, 1995). As a consequence, Cardoso enjoyed particularly robust levels of public support and approval as he entered office. That did not, however, make privatization easy. The remainder of this paper focuses on the specifics of energy privatization and regulation, all of which began under Cardoso, and all of which remain only partially resolved.

# The Taming (?) of "Petrosaurus Rex"

There is probably no SOE more sacred to Brazilians generally and Brazilian nationalists particularly than Petrobrás. So far, Petrobrás has not been privatized -- only "flexibilized." The reforms in the sector have pushed Petrobrás toward increasing "corporatization" -- i.e. functioning more like a corporation and less like a state organ. But, there is no guarantee that that process will continue. Petrobrás has made impressive gains as a corporation, competing effectively at least with the large, integrated global firms. Yet, it remains an agent of the state with continuing political influence.

# *Background to Privatization (or "Flexibilization")*

Petrobrás was created in probably the most heated and controversial argument over development policy in Brazilian history. The expansion of the industrial economy under import substitution industrialization led to sharp increases in the number of roads and automobiles in the country (Randall, 1993). Demand for oil rose sharply in the Post World War II period, provoking an intense debate over petroleum policy. The liberal, pro-market forces argued in favor of liberalization of the sector and promoted policy that would encourage the entrance into the sector of the large petroleum trusts, such as Standard Oil. The liberal approach was led by General Juarez Távora, a leading figure in the 1930 coup and a critical figure in the promotion of developmentalism, especially in the petroleum sector.

By the 1940's, however, he had become convinced that the state lacked the financial and technical capacity to develop the sector (Smith, 1976). He was opposed by strong nationalist figures in the oil sector (notably Horta Barbosa, then director of the National Petroleum Council), within the military, and among leading intellectuals. This latter group mounted a campaign against the liberalization effort, dubbed "the Oil Is Ours" (*o petroleo é nosso*). The campaign led to a surprisingly large, powerful public mobilization. University students, workers, and members of the middle class joined in public demonstrations against the legislation from 1947-1948. By the end of 1948, the campaign had killed the bill, but the issue was not resolved (Smith, 1976). Instead, it became an electoral issue in the 1950 elections with the return of Getúlio Vargas.

Vargas campaigned on a nationalist platform, but his *modus operandi* had always been to seek out compromise positions between contending sides (Skidmore, 1967). In the period right after his election, various alternatives for the oil sector were debated. Vargas favored a model that forged some balance between state ownership and private investment, such as state ownership of the fields, with concession contracts to private firms for exploration and the rights to any oil found. Others suggested mixed models with limits on foreign participation. Yet economic liberals remained adamant that the sector had to be fully liberalized. They argued that domestic private capitalists would not invest in the sector, and the state was incompetent.

Furthermore, the state's presence in the sector would discourage the major international firms that were already unenthusiastic about investment in Brazil. For strong nationalists, the international trusts were trying to maintain Brazil in "petroleum slavery" and had already announced earlier that Brazil had no oil (Smith, 1976). Thus, liberalization would simply hand the sector to the very foreign interests that were so hostile to Brazilian development. With the middle ground untenable and the conflict between the two sides heating dangerously, Vargas sided with the nationalists and pushed for the creation of Petrobrás in 1953, granting the SOE monopoly control of the entire sector, downstream and upstream.

The controversy did not end however. The liberal, anti-Vargas forces intensified their criticisms, branding the nationalists as communists and seeking alliances within the non-nationalist military. Press attacks, led by Carlos Lacerda, were deeply inflammatory. Finally, in 1954, the military pushed for Vargas' resignation. Instead, Vargas committed suicide. His suicide note blamed the foreign interests and their domestic allies who had opposed him on the creation of Petrobrás. His note ended by saying that he had fought for the greater good of Brazil against those who would sell it out to foreign interests and that he "offered his life in the holocaust." The backlash against liberal forces was swift and violent (Skidmore, 1967). The turmoil probably was the turning point in Brazil's development history, signaling the final victory of the nationalist model over its liberal, free market rival. It also burned Petrobrás into the national consciousness in a way that no other firm has. In short, Petrobrás became the most durable symbol of Brazilian sovereignty.

No other SOE generated the same kind of mythic importance for the general public and for nationalists.

Petrobrás' performance since 1954 only added to its reputation for Brazilian nationalists and for the Brazilian public. By 1980, Petrobrás had spawned more than 30 different companies in a variety of related sectors, with almost 50,000 employees, and by far and away, the largest profit margins of any SOE (Barzelay, 1986). Prior to 1954, the international major oil companies had expressed skepticism about Brazil's capacity to produce oil. Yet, under Petrobrás' leadership, Brazil's known recoverable crude oil reserves grew from 27 million barrels in 1954 to 555 million barrels. Crude oil production grew from under 200,000 barrels per year to more than 10 million in 1980 and more than 36 million in 1990. Brazil's dependence on foreign oil imports dropped from over 90 % in the late 1950's to just under 50 % in the late 1980's (Randall, 1993). Petrobrás' status as a symbol of national pride therefore was strengthened by its economic performance. Not surprisingly, resistance to the possible privatization of Petrobrás has been stronger than for any other SOE.

# What Has Happened

Yet, considerable progress toward reform, and perhaps even privatization, has occurred under the Cardoso administration. The first step came with Constitutional Amendment #9 (PEC 9) of November 1995. PEC 9 ended Petrobrás' constitutional protected monopoly on all aspects of oil production in Brazil. The amendment "flexibilized" the sector, leaving Petrobrás intact and in state hands, but permitting private corporations to provide services through concessions. The amendment also called for a new law to establish the new rules of the sector, create a regulatory agency, and "guarantee the supply of petroleum derivatives in the national territory" (Presidencia da República, PEC 9).

The law, "the Petroleum Law" (Law no. 9.478, of June 1997), established that any firm, regardless of origin of capital, could operate in exploration, production, transport, refining and import/export of petroleum. In the areas of refining and transport, any firm with an administrative structure based in Brazil and recognized under Brazilian law could submit a request to operate to the regulatory authority. The Law also set a timetable for complete

liberalization of prices and imports of petroleum. Finally, the law established that Petrobrás would remain under state ownership and tied to the Ministry and Mines and Energy (Rodrigues and Giambiagi, 1998). However, the "flexibilization" also opened the door to Petrobrás entering into joint ventures in all areas of oil and gas, both inside and outside the country. Thus, to some extent, Petrobrás' retained its privileged status *vis a vis* the state, while expanding its opportunities to function in the energy sector through subsidiaries, partnerships, and joint ventures (Kolodziejski, 1996).

In addition to the Petroleum Law, the government issued Decrees no. 2.455 and 2.457 (January 1998) that created the regulatory oversight structure for the oil sector. Decree 2.455 created the National Petroleum Agency (ANP) to monitor and regulate the sector and to manage concession contracts. Decree 2.457 established the National Energy Policy Council (CNPP) as an organ of the Office of the President to advise on the norms and rules of the sector, and to ensure the supply of petroleum derivatives. The ANP immediately set out to fulfill its function of introducing competition into the sector by requiring Petrobrás to submit a plan for exploration and development of existing basins. Ultimately, Petrobrás was granted rights to basins already under development, and given a three year deadline for exploration of an additional set totaling together roughly 7 % of the country's basins. The remaining 93 % were slated for auction with some success in terms of attracting private sector interest and generating revenues, but few real successes for the bidding firms in terms of finding oil. The relatively discouraging results have led some to argue that the ANP permitted Petrobrás to retain the highest quality basins for itself.

In the wake of the 1998 legal reforms, Petrobrás has moved considerably toward a stronger corporate performance. In August 2000, the state sold off 28.5 % of its voting shares in a highly successful auction that drew U.S.\$ 4 billion. The sale left the state with a 55 % stake in the SOE. Petrobrás has charted an ambitious path of investment -- over U.S.\$ 33 billion from 2000 to 2005 to become a competitive integrated energy company. The SOE's plan includes expansion into natural gas, especially through joint ventures to bring both Bolivian and Argentine gas to Brazil, increased oil refining up toward 2 million barrels a day, and increased overseas expansion with an eye toward strengthening its regional position ). As the paper by Steven Lewis

("Deregulating and Privatizing Brazil's Oil and Gas Sector") indicates, Petrobrás has made notable gains in this direction.

# How It Happened

Given the intensity of Petrobrás' symbolic value, the question is how did the government succeed in promoting this extent of change, and what does it imply about future progress? The most important obstacle to change was the constitutional protection of Petrobrás' monopoly. Brazil's constitution can be amended, but the process is lengthy with multiple veto gates. To amend the constitution, the government must present the amendment in the lower house, where a special committee forms to review the bill. The chamber leadership (*Mesa da Camara*) appoints the committee chair and the "reporter" (the member responsible for ushering the bill through committee and reporting it to the full chamber -- and a powerful position in Brazil's committee structure). The membership is selected by party leaders and allocated in proportion to the parties' representation in the chamber. Once the bill is passed in committee, it needs to be voted on twice in the lower house and twice in the Senate before being sent to the president to be signed into law. In both houses, the amendment requires a 3/5 vote -- not a simple majority. The amendment can be defeated or amended any time in this process and can be derailed by individuals in leadership positions -- whether in the chamber leadership, or within the special committee.

In the case of Petrobrás, formal positions within public opinion and among party leaders pointed to the possibility of privatization. Despite Petrobrás' undeniable successes over the decades since its creation, problems remained. Brazil remained dependent on foreign imports and vulnerable to variations in crude oil prices. Petrobrás had been increasing its production capacity steadily, but it simply lacked sufficient investment capacity.<sup>3</sup> Furthermore, privatization in the mid 1990's benefited from success with firms like Usiminas or Embraer. By a small margin, a majority of Brazilians supported privatization (Manzetti, 1999). More importantly, in the

<sup>&</sup>lt;sup>1</sup> The constitutional amendment process is explained in full detail in Rego and Peixoto, 1999.

<sup>&</sup>lt;sup>2</sup> The senate generally is more amenable to the executive than the legislature, largely because of differences in voting rules that make senators less beholden to narrowly defined constituencies.

<sup>&</sup>lt;sup>3</sup> Barzelay (1986) indicates that concern about Petrobrás had surfaced already by the early 1980's as the OPEC oil shock and debt crisis clearly demonstrated the insufficiency of Petrobrás for Brazil's energy needs. Randall (1993) charts Petrobrás' gains into the 1990's.

congress, the major political parties' platforms pointed to the possibility of privatization. Three of the main parties in President Cardoso's coalition supported either a full or partial breaking of Petrobrás' monopoly status. The largest party in the coalition, the PMDB, was extremely diffuse, with views ranging from maintenance of the *status quo* to full privatization (Rego and Peixoto, 1999).

Nevertheless, neither public opinion nor official party statements are determinative of legislative outcomes. The government faced two significant obstacles. First, the Workers' Party (PT), and the largest labor central (CUT), and the petroleum workers adamantly opposed any form of privatization. Workers and the PT opposed privatization both on ideological grounds and on the purely instrumental grounds that any privatization would likely lead to large-scale lay-offs. Second, the congressional leadership, regardless of formal party positions, resisted the privatization of Petrobrás, and threatened to block any constitutional reform if privatization were an option. Cardoso came under attack from the unions, from left wing opposition parties, and from leftist and nationalist elements within his alliance, including within his own party (Rodrigues and Giambiagi, 1998).

Congressional resistance also came on instrumental grounds. Petrobrás' internal management opposed privatization and as Brazil's most powerful SOE, they were able to call on a large number of allies. Petrobrás was both a consumer of capital goods and a supplier of inputs to sectors like the petrochemical industry (Zamith and Santos, 2000). As such, the SOE could mobilize support among business lobbies directly threatened by privatization. Furthermore, as a massive SOE, Petrobrás provided countless patronage benefits through its hiring practices, through its investments, and through its purchasing and contract decisions.

Privatization requires members of congress to relinquish control of these potentially rich patronage resources and therefore made many reluctant to accept privatization, regardless of the merits of the argument in favor. Finally, nationalists in the military opposed privatization on the grounds that oil was a strategic sector. Although the military cannot influence politics the way they did in the past, it can still mobilize support on the congressional right and still has links to

technocrats in the large SOEs. Therefore, party platforms and public opinion may have been propitious for a more ambitious reform, but the obstacles in congress were formidable.<sup>4</sup>

As it turned out though, the petroleum workers played into Cardoso's hands. Petroleum workers went on strike in May 1995, striking for 31 days, even after the labor court ruled the stoppage illegal. The strike shut down production, quickly leading to shortages, most importantly of gas for cooking. As poor people began to suffer, the comparatively much better off organized workers appeared to be privileged elites protecting their status at the expense of the poor. Strategically, the strike was a disaster as public opinion turned sharply against the unions.

Ultimately, Cardoso called out the military to shut down the strike and return Petrobrás to production (Brazil Report, June 8, 1995). Cardoso took advantage of his public relations victory to turn against his opponents in congress, publicly calling leftists and nationalists "stupid." Cardoso effectively had won the reform battle (*Veja*, May 3, 1995). Over the course of the remaining half of 1995, the President successfully reformed the constitution, eliminating all constitutional limits to private sector and foreign capital participation in the Brazilian economy.

Yet, his victory in the reform of the article pertaining to oil was incomplete. To pass the Petrobrás reform, his congressional allies forced him to promise that he would not privatize the SOE (Rodrigues and Giambiagi, 1998). During congressional debates on reform of the sector, congressional allies indicated that they would support liberalization of the sector, but not privatization. To ensure that end, they sought to include the prohibition against privatization in the actual amendment. To prevent that, Cardoso formally promised to include language guaranteeing state ownership of Petrobrás in the accompanying, ordinary law. In the context of Cardoso's popularity, the congress relented and passed the amendment ending Petrobrás' monopoly without the protection of Petrobrás' status as an SOE by sizable margins. The difference is crucial, as ordinary law requires only simple majorities instead of the supermajorities required for constitutional amendments.

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<sup>&</sup>lt;sup>4</sup> These observations are based on author interviews with participants in the 1995 constitutional reform process, Brasília, November, 2000.

With the amendment passed, the progress of reform passed overwhelmingly to the executive branch. It is important to note that the Brazilian legislature takes very little initiative in the legislative process. Legislators have access to technical expertise, but not like the American system where every standing committee has technical experts permanently attached to them. Instead, technical experts work out of one office per house, with a small number of assistants per legislative area. The small number of individuals means that the employees are not truly technical experts -- rather they are closer to generalists with areas of greater specialization. Even so, members do not typically avail themselves of this resource as they wait on the executive, which can and does rely on highly trained technical expertise, to present legislation. Thus, once the larger, politically salient, and polemical issues are resolved in congress, there are few legislators that can or do interest themselves in the details of the policy.

To a large extent, that accounts for the political progress of oil sector reform in Brazil since 1995. Petrobrás has remained majority-state owned because of a political compromise between Cardoso and the congressional leadership. But the details of the "flexibilization," the progress of the regulatory agency, and the progress of the liberalization of prices and imports are all executive initiatives. Executive dominance of the process, however, does not guarantee that the path toward privatization will continue. First, the Brazilian bureaucracy remains divided internally on issues of economic development, and there are important points throughout the government where there is considerable skepticism about the neoliberal model (Manzetti, 1999). Second, key cabinet posts typically are allocated as part of a governing compact. The progress of privatization depends on which party -- and who within the party -- controls the relevant ministry.

Up until 2002, the Mines and Energy Ministry had belonged to the PFL. The PFL has been consistently pro-liberalization and privatization rhetorically, although the party is also notorious for its dependence on patronage and its use of cabinet posts to secure resources. Within the Lula administration, Mines and Energy Minister Dilma Rousseff, is a member of the Workers' Party (PT) with strong leftist credentials. She appears to favor no radical change in the general privatization and market thrust in the energy sector, albeit with some adjustments in energy pricing policy and more national procurement to secure Brazilian jobs.

# Remaining Challenges

The Lula government energy team needs to dispel concerns about arbitrary interference. Unlike other areas of reform, the energy sector remains only partially reformed. The problem for Petrobrás is that it is still in an in-between stage -- neither privatized, nor fully and adequately liberalized, but no longer a pure SOE.

For Petrobrás, there are three remaining unsettled questions. First, can Petrobrás succeed as either a private corporation or an SOE in a truly competitive environment? The preliminary results suggest that Petrobrás has come a long way since 1995, but it is not clear how well the firm would do without the benefit of Brazilian government favoritism and continued forms of protection, such as partially controlled imports and prices, or without strong incentives for foreign firms to enter into joint ventures. Second, Brazil as yet lacks a clear model of how continuing restructuring of Petrobrás should proceed. Latin America offers two distinct alternative models in the Venezuelan PDVSA, and Argentina's YPF. The former is a model comparable to Petrobrás' situation today, in which the firm remains in government hands, but authorized to enter into multiple joint ventures with strategic partners. The latter is one in which ownership is transferred, but the government retains a "golden share," which may, as in the case of YPF, be eventually sold off. In either event, the future of Petrobrás remains on hold (Rodrigues and Giambiagi, 1998).

Finally, the question of the rules governing the sector remains unsettled. In part, this is a problem of new regulatory structures. Even in the United States, regulatory regimes need to be renegotiated regularly and the early stages of regulation involved substantial trial and error (Schuck, 2000). In Brazil, the exact definition of authority and jurisdiction between the Ministry of Mines and Energy and the ANP remains uncertain and there are still strong connections between staff members of each. In the Brazilian context, however, there are larger questions that stem from the novelty of regulatory agencies and the lingering presence of Petrobrás as an SOE. This issue is discussed in greater detail below.

# Let There Be Light: Privatizing Electric Power

The privatization of electricity has been generally easier politically in Brazil than privatization of For one, the electrical energy complex lacks one single, prestigious SOE for opponents to rally around, such as the case with Petrobrás in oil or Telebrás in telecommunications. Moreover, the process of acquiring state control was far less dramatic and conflictual than was the case with Petrobrás. Similarly, with ownership in the sector divided among generation, transmission, and distribution as well as among state, federal, and private, the sector presents a more complex political profile than the simple for or against of oil. The diffusion of ownership also helped weaken unions' influence, as workers are dispersed across the roughly 64 different electricity plants in the Brazilian system. As a result, unions have had little real effect on the process. In addition, the constitutional provisions protecting state supply of electricity were less restrictive than those governing the oil sector. Finally, the increasingly obvious shortages of electricity supply make it easier to make a case in favor of privatization. Nevertheless, the electricity reform process is far from complete and pressing issues remain unresolved. Most importantly, the government has had political capacity to push privatization in distribution, but not in transmission or generation and the resulting model has proven inadequate to meet the country's needs.

# Background to Electricity Privatization

Over the course of 50 years of government ownership, the Brazilian electricity system grew large and complex. The market structure mixed federal, state, and very small amounts of private ownership. Federal ownership was concentrated in transmission and generation, over 90 % of which was hydroelectric. Federal ownership was largely through the subsidiaries of Eletrobrás -- the four regional generation and transmission companies, Eletronorte, Eletrosul, Chesf, and Furnas. Through these, the federal government accounted for 54 % of the generation, 32 % of transmission, and 6 % of distribution. Each state had at least one distribution company, with several fully vertically integrated firms, such as Cemig or Copel, owned by states as well. Together, firms owned by state governments accounted for 45 % of generation, 68 % of the transmission, and 92 % of distribution (Mendonça and Dahl, 1999). In addition to these, local governments owned a small number of distribution firms.

Prior to 1945, all electricity production, from generation to transmission to distribution was almost entirely in private, mostly foreign, hands. In fact, as of 1930, two foreign firms controlled 65 % of the market. Under the new Vargas government, concerns were raised that a private monopoly was emerging in the country and that it was unlikely that either of the two firms were interested in expanding the network into lower density areas (Almeida and Pinto Jr., 1999).

State ownership, at both state and federal levels, began after 1945 and particularly picked up after 1950 as the developmental philosophy came to predominate in the Brazilian bureaucracy and among political leaders. Economic planners argued that the country needed to expand its electricity supply and to control rates in order to promote industrialization of the country. Thus, the federal and state governments together began a process of acquisition of existing capacity and investment in new capacity. Acquisition was achieved through both carrots and sticks. The government offered fair prices for privately owned firms and as a result was able to transfer ownership on relatively amicable terms (Armijo and Jha, 1996). At the same time, however, government regulation set tariffs at artificially low rates. This facilitated industrialization, but it also encouraged private owners to get out of the market (Almeida and Pinto, Jr., 1999).

In 1962, the government created Eletrobrás, the federally owned holding company that came to dominate the market for electricity generation in Brazil. The argument was that the Brazilian system had become so large and diverse in its market structure, that further expansion required a stable institutional framework in which to take place. Eletrobrás thus assumed a central role in power generation, but also acted as a quasi regulator. Eletrobrás set tariffs, prepared plans for expansion, and specified the role of subordinate firms in the plan. Investment finance came from the firms' own revenues, but also from domestic and especially international loans (Almeida and Pinto, Jr., 1999). Expansion of state ownership continued on through the 1960's and into the 1970's when the last significant transfer of ownership took place when the federal government acquired the Light Company in 1978 (Armijo and Jha, 1996).

Under state ownership, the system expanded dramatically. Between roughly 1940 and 1990, the country's electricity supply capacity increased by 500 %. By 1990, roughly 93 % of households had electrical power. The country had over 170,000 kilometers of high-voltage transmission lines and over 1,604,000 kilometers of low-voltage transmission lines. Two main grids, the Center-South and the Northeast, connected virtually the entire country with only the Amazon region isolated (Mendonça and Dahl, 1999). As of the late 1980's, public opinion still showed enthusiasm about the public supply of electricity, with 58 % of respondents rating the system positively (Nóbrega, 1992).

Public approval, however, was a poor indicator of the health of the system. In fact, public approval was premised on two factors. First, average electricity prices had been steadily trending downward over the course of the 1980's. Second, the electricity supply on the face of it appeared adequate to meet Brazilian demand. Neither of these factors was genuinely positive however. The dependence on foreign loans for expansion left the system highly vulnerable to the debt crisis that hit Latin America in 1982 (Almeida and Pinto Jr., 1999). In fact, after 1982, external financial flows turned negative as debt payments exceeded new investment financing. The problem was compounded as first the military government, then the new democratic government pushed electricity tariffs downward as a control on inflation.

The loss of revenue squeezed the electricity firms even more and made them even more dependent on outside loans. Between 1975 and 1984, public utility debt jumped from U.S.\$ 5 billion to over U.S.\$ 23 billion. The supply appeared adequate only because the debt crisis also curtailed demand for electricity, so that demand grew on average 5.7 % annually during the 1980's as opposed to over 11 % per year in the 1970's (Almeida and Pinto Jr., 1999). In fact, the system was severely underfinanced and desperately in need of new investment. The macroeconomic environment of the 1980's and 1990's, however, assured that no new government financing and no new international lending would be forthcoming. Instead, the electricity system became a prime target for privatization.

## What Has Happened

Two significant changes have occurred since the early 1990's. First, successive governments have recognized the urgency of reform in the electricity system, and starting in 1993 have altered the legal framework to facilitate privatization and private investment. Second, a large number of privatizations have taken place, although almost exclusively of state owned distribution companies. The process has been driven primarily by macro-economic considerations and facilitated by fiscal crises in many of the federation's states (Rufin, 2000). Unfortunately, a variety of issues have prevented further privatizations, and the result is distinctly sub-optimal. In short, generation and transmission have remained in government hands, while distribution is largely private. Ongoing political battles, government interference, and regulatory confusion have discouraged new investments (Rufin and Romero, n.d.). The result is that while Brazil has emerged from the 2001 crisis, a new one is already predicted for the near future.

Reform of the electricity sector required a series of legal changes to advance. The reform process began under the arch nationalist government of President Franco. The first step, Law 8.631 in 1993, altered the pricing system to allow firms to charge customers tariffs that reflected real costs. Previously, Eletrobrás set a uniform rate for the whole country, regardless of the actual costs of delivering power to that region. The system generated obvious distortions. Therefore, new investments in the sector required realistic pricing, regardless of whether the government ultimately pursued privatization or what model of privatization it followed if it did choose to do so. Subsequent regulation (Regulation 1063/93) created additional flexibility for utilities in setting tariffs (Mendonça and Dahl, 1999).

The next legal changes took place under President Cardoso. Law 8.987 of February 1995 regulated the process of allowing private firms to provide public services through concessions. This last piece was the cornerstone for privatization of all public utilities. It was followed by Law 9.074 of 1995 that determined the rules for bidding on concessions. Finally, Law 9.427, passed in 1996 created the energy regulator, ANEEL, and granted the new agency the power to monitor the sector, authorize new concessions, establish tariffs, and conduct auctions. The new agency began operations in 1997 (Rego and Peixoto, 1998).

By the time ANEEL came into existence, the government had already privatized several distribution companies, most prominently, Light based in Rio for U.S.\$ 2.2 billion for 58 % of its stock. Between the sale of Light in 1996 and 2000, virtually all the non-integrated distribution companies had been sold, generating roughly U.S.\$ 15 billion for the state and federal governments (Mendonça and Dahl, 1999). Buyers, mostly foreign power companies with minority participation from Brazilian banks, pension funds, and large business groups, paid significant premiums on the minimum prices. In addition, the federal government successfully sold Eletrosul (now Gerasul), one of the subsidiaries of Eletrobrás.

The results for other areas have been less encouraging. Chesf, Furnas, and Eletronorte -- the remaining parts of Eletrobrás -- had been slated for privatization. The original expectation was that they would be auctioned in 1999, but opposition to the sale led the government to postpone them until after the 2002 elections and then to announce that they would not be privatized. The government has also failed to attract investment into generation, with ANEEL making several failed efforts to grant concessions for new hydroelectric plants. The prospects of new thermal plants have also remained disappointing as new, private investment has been discouraged by Petrobrás' continuing domination of the sector (Rufin and Romero, n.d.). Finally, efforts to sell Brazil's only fully integrated plants, CEMIG and COPEL, have resulted in disppointment. CEMIG was partially privatized, producing a partnership between the state of Minas Gerias, AES of Houston, and Mirant (a French power firm).

However, after the election of Itamar Franco as governor in 1998, Franco terminated the agreement to transfer the shares -- a 33 % block for U.S.\$ 1 billion. The state supreme court ruled in 2001 that Franco's actions were legal (Brazil Focus, August 10, 2001). While Mirant and AES have vowed to take the fight to the federal supreme court, the decision added to general unease in the private sector about Brazil's electricity privatization program. As for COPEL, it has not yet been privatized as both protestors and potential bidders have repeatedly caused a postponement of the auction.

Thus, as of 2003, the electricity market structure in Brazil remained only marginally different than in prior to re-structuring, although the legal framework differed substantially. Generation

remained overwhelmingly state owned, although concession rights for private actors now exist, even though few firms are taking advantage of it. Transmission remained largely state owned, with the model for the future of the segment still unresolved. Finally, distribution had passed largely from state hands to private hands. Yet, certain aspects remained similar. Competition is very limited with the newly privatized firms maintaining substantial market power in circumscribed regions and with residential and small business customers lacking choice (Rufin, 2000). Large customers, by contrast, do have choices in their providers and freedom to negotiate tariffs (Mendonça and Dahl), 1999). Competition exists now in that distribution companies may choose among the few generation companies. But, the continued reliance on hydroelectric power creates considerable barriers to entry and state ownership further clouds the competitive nature of the market.

## How It Happened

In the case of electricity restructuring, there are two separate stories in Brazil. The first is how did the government privatize state government owned distribution companies so easily? The second is why can't the government privatize anything else? Underlying both of these stories is another issue: why hasn't the government been able to define a coherent model of privatization in the electricity sector?

The answer to the last issue appears to be that there are too many conflicting interests involved. As with other major privatizations, SOE managers play an important role in helping or obstructing privatization. In the case of electricity, Eletrobrás has been a consistent opponent of privatization and of increased competition in the sector. Technocrats from the Ministry of Mines and Energy (and with the predecessor to ANEEL, the National Department of Water and Energy, DNAEE) have also remained committed to maintaining a strong state role in the sector. Their influence together was strong enough to influence Coopers and Lybrand, hired as consultants by the government, to back away from their original recommendation that Brazil follow the "English model" of restructuring. The BNDES has played a role in the reform process, but largely as a proponent of privatization on pragmatic, fiscal grounds (Rufin, 2000). The complexity of the sector makes it hard for non-technical people to develop their own recommendations.

The problem was compounded by the fact that the government began to privatize the sector before a full privatization model was developed, before the new rules of the sector were clarified, and even before ANEEL was legislated into existence (let alone begin operations) (Manzetti, 1999). Most of the distribution segment of the market had been transferred before ANEEL had even begun to act. As a result, the government had created new interests and a new reality on the ground that could and have fought the government and ANEEL on efforts to establish new rules while investors have complained that they are subject to rules made up after the sale (Manzetti, 1999). If we add to the mix the government's exceptionally complex reform agenda (including the more successful telecommunications reform and the urgent pension reform), a series of macro-economic shocks, and an energy crisis, it is not hard to understand that the government has largely reacted to circumstances.

This context also helps explain the government's difficulty in privatizing the generation segment and the vertically integrated firms, CEMIG and COPEL. In addition to the confusion detailed above, the government encountered crucial resistance in the congress. Electricity firms are important sources of patronage. But, they are also politically very salient. Customers notice rate increases quickly. Residents also quickly notice extensions of or improvements to service. For that reason, politicians are loath to relinquish control of such firms.

In the case of Chesf, Furnas, and Eletronorte, timing was also a critical factor. The government sought to privatize them originally in 1999, at a time when the collapse of the Real Plan -- Cardoso's highly successful stabilization plan -- made the government singularly unpopular. Furthermore, three key politicians acted as veto players, simply blocking the legislation necessary to move the firms toward privatization. Eletronorte was blocked by Senate President Jáder Barbalho (PMDB). Aécio Neves (PSDB), president of the chamber of deputies, blocked the privatization of Furnas. Finally, Antônio Carlos Magalhães, the informal king of the PFL -- ostensibly the party most supportive of privatization -- blocked Chesf (Brazil Focus, February 23, 2001). In each instance, the respective firms represented critical sources of patronage to powerful politicians with capacity to block legislation. In the case of Barbalho and Neves, that ability came from institutional leadership roles that allowed them to set the legislative agenda. In

Magalhães' case, it was as leader of one of the government's most important congressional allies and the party that controlled the Ministry of Mines and Energy. With everything else the government faced after 1998, the government simply lacked the capacity to overcome the extent of resistance.

So, what accounts for the greater degree of success with the distribution companies? The answer lies partly in timing. The strategy designed by Cardoso officials in the Mines and Energy Ministry envisioned privatization and creation of competition in generation and distribution, but beginning with the distribution segment (Manzetti, 1999). Cardoso's most effective period was between 1996 and 1998. In that time, the president seemed so capable of attaining his goals that critics took to calling his rule the "imperial presidency." The larger reason, however, lies in the fact that the distribution companies were either wholly or largely owned by state governments. This meant that the decision to privatize was primarily a negotiation between the executive at the federal and those at the respective state levels.

At the state level, several conflicting factors operated. On the one hand, public utilities offer state executives the same patronage opportunities that they offer federal level politicians. Governors can and did manipulate hiring and contract decisions to serve political purposes and extending service to under-served areas can be particularly rewarding politically. On the other hand, many governors also expressed an awareness of the severity of the problem and the need to privatize as a means to increase investment in the sector. These cross pressures meant that governors could oppose or support privatization for good political reasons. But, the governors also faced fiscal issues. State level debt had also reached critical proportions by the early 1990's -- roughly U.S.\$ 70 billion by 1992.

States had relied earlier on a number of mechanisms to help them out. State banks, like all banks in Brazil, took advantage of banking rules that allowed them to profit off of inflation at the expense of depositors. Furthermore, states routinely and successfully appealed to the federal treasury to bail out heavily indebted state banks and to roll over state level debt on favorable terms (Armijo, 1996). In this, they were aided by the federal senate, which retains legislative oversight over the process. Finally, the states could rely on constitutionally mandated transfers

of tax revenues from the federal government, without accompanying spending obligations. Thus, state governors were in a position to borrow more and more heavily, use the funds for patronage purposes, and suffer few fiscal consequences (Montero, 2000).

This situation changed in the early 1990's and especially after inflation stabilized in 1994. With inflation gone, profits on inflation disappeared as well. In addition, it became much easier to monitor state bank finances and thereby to curtail the practice of making bad loans and covering them with the help of the federal treasury. Under Cardoso in particular, the government acquired greater control of government finances at all levels (Montero, 2000). Finally, starting in 1993, the federal government successfully recovered a large portion of the transfers to the states, thereby depriving them of a source of revenues.

As a result, the states faced two problems. First, they had a pressing need to raise finances to allow them to pay down their debts and recover their spending capacity. This was especially true over the course of the 1990's as politics became increasingly democratic and competitive and governors needed to perform. Thus, privatization provided for the states the same kind of financial incentive it offered the federal government. To illustrate, the very first privatized state electricity company was Escelsa, the distribution company of the state of Espirito Santo. The striking thing about Escelsa was that Espirito Santo was governed by the Workers' Party at that time (Armijo and Jha, 1996). Yet, poor state finances and poor electricity service led the governor to embrace privatization as a solution, regardless of the deep animosity toward privatization of the national party.

The second problem states faced was that even if they did oppose privatization, most states depended heavily on the federal government for transfers and debt roll-overs. Only the largest states, such as São Paulo, Rio de Janeiro, or Minas Gerais, generate sufficient revenues to pick a fight with the federal government (Armijo and Jha, 1996). Smaller states could be cowed into submission by the fact of the federal government's control of finances. Finally, states' poor fiscal conditions coupled with crippling debt in some electricity utilities forced Eletrobrás to acquire ten state owned distribution companies. This again gave the federal government the leverage it needed to privatize the state level utilities. The result is their complete privatization.

The government adopted one last measure to ease the political process of privatization. One potential risk of privatizing large public utilities is that the likely buyers -- based on experience and sufficient capital -- are large, foreign firms. Selling off prize assets to foreign firms can provoke nationalist opposition as well as resistance from business groups and labor. To forestall business opposition, the government chose a model of privatization that permitted wide participation in acquisition of shares and participation in conglomerates. As a consequence, business opposition was minimized and large, influential business groups, such as Votorantim and Camargo Correa, were able to enter the sector (Rufin, 2000). Workers' opposition remained strong, but was mitigated by opportunities to buy discounted shares, in some instances as much as 10 % of the shares of the company (Manzetti, 1999).

## Remaining Challenges

Serious issues remain unresolved in the Brazilian electricity infrastructure and the current and successor governments are going to have to address them. First, Brazil still has inadequate investment in generation. The large federally owned generation companies are no longer even slated for privatization, having been left out of the government's 2002 budget target law (LDO). Privatizing them is risky because the barriers to entry in hydroelectric generation are substantial and the danger of creating private monopolies is real. This is particularly true because Brazil does not yet have strong anti-trust legislation or enforcement and because the courts are not completely reliable. The large size of the existing hydroelectric companies has discouraged other entrants and as of 2003, ANEEL has granted far fewer concessions in hydroelectric generation that it had targeted.

A second concern is that the rules of the new system are still largely undefined and subject to continuing negotiation and renegotiation. This is particularly true with reference to tariffs. The concession contracts granted the new operators transition periods with very high ceilings on tariffs (Rufin and Romero, n.d.). The BNDES established these rules with an eye on increasing the revenues from the sales. The expectation was that the possibility of getting very high returns would encourage higher bids, and the expectation proved correct. Winning consortia bid well above the minimum price, and the new operators did, in fact, raise rates and record very high

profits. The end of the transition period coincided more or less with the energy crisis and the beginning of the 2002 presidential election campaigns. At that point the government resumed its intervention in tariff setting, pushing rates down and holding them throughout 2001. The controls on tariffs angered the new foreign operators in the country, with several putting off investment plans, and one major firm, AES, suggesting it would sell its assets and leave the country. The reasons cited for these firms' actions were disappointment with performance in 2001 and concern about the lack of clear rules for the sector (Brazil Focus, May 11, 2001).

In January 2002, the Cardoso administration announced a "new model" for the sector in implicit recognition of the failure of the plan to that point (Brazil Focus, January 11, 2002). The new model included a pledge that the federal generating firms will remain under state control. On tariffs, the government announced that electricity prices will be determined by the water levels in the hydro reservoirs and that federal hydroelectric units will hold down prices to prevent sharp increases in customer tariffs once controls are lifted. Further, the government would install a new, federally owned gas thermal electric generating unit to be held in reserve as an "anti-blackout" protection. Finally, the government announced that Chesf would not be privatized, but would be broken into two separate generating firms and one transmission. In short, the Cardoso government made a commitment to maintaining a federal role in electricity for the foreseeable future. The last remaining issue concerns ANEEL, the regulatory agency.

## Regulating the Newly Liberalized and/or Privatized Sectors

Privatization transfers ownership from state hands to private hands, but it does not ensure a good result. Privatization may result in the establishment of new private monopoly power, which may be just as bad if not worse than public monopoly power. Conversely, government officials may retain their capacity to intervene in the newly privatized sector. In either event, privatization will generate revenues for the government -- a critical reason for privatization in many countries and certainly in Brazil. But, it may not produce any of the other expected benefits of privatization. Those include increased investments, increased competition, and improved efficiency, all of which are expected to benefit consumers. In fact, the failure to produce these other benefits can

quickly erode public support for privatization. The solution to the problem is effective regulation. Effective regulation, in turn, depends on an effective regulatory agency.

## The General Problem of Regulation

The key to an effective regulatory agency is clear separation of the agency from market actors as well as from government. The latter is particularly important in developing countries where there are long histories of government intervention. In the United States, the larger pre-occupation is with "capture," where regulated firms acquire undue influence over the regulator. This is often the case when regulators are individuals with strong connections to regulated firms. In Latin America in general, and Brazil specifically, this is less of a problem than keeping government out of the sector and the regulatory agency (Levy and Spiller, 1996).

There are a number of mechanisms recommended to achieve credible separation of the regulator from the government (Rufin, 2000). Regulators should be individuals with technical expertise in the relevant sector. Ideally, a board of directors rather than a single director should govern the agency. Directors should be appointed by the president with congressional oversight and approval, and terms should be staggered so that they do not coincide with presidential elections. Dismissal of directors should be for well-specified causes only, and not at the discretion of either the president or the relevant minister. These rules are designed to make sure that regulators are not simple agents of the executive who can intervene in the sector to support presidential objectives. Design of the agency should also maximize separation from the relevant ministry. Ideally, the agency is a stand-alone agency without formal connection to the ministry, although in practice the agencies are often independent offices within the ministry. To be truly independent of government interference, agencies need independent sources of revenue, typically from user fees or special sectoral taxes earmarked for the agency.

Finally, the rules regarding firms' right to appeal also affect the independence of the regulator. Ideally, firms would have the right to appeal decisions to an independent judiciary capable of resolving the issue without fear of political manipulation. Chile is virtually alone among Latin American countries in providing such a judiciary. In the absence of a completely independent judiciary, a next best alternative is that the otherwise independent regulator serves as both

regulator and mediator of appeals, at least in the first instance. The least form of protection against excessive discretion on the part of the regulator is appeals directly to the government. In that case, governments sympathetic to the firms or corrupt officials may rule in favor of the complainant, but such a situation also provides no protection against politicians acting against the firms out of political considerations.

In the absence of a credible, independent regulatory agency, firms will withhold investments for fear of expropriation -- either directly, or indirectly through administrative actions. Thus, privatization may yield immediate positive results, but the benefits may quickly evaporate. Firms may extract monopoly rents, sell off assets, or plunder the former SOE in other ways. But, the sector will not develop appropriately without assurances that firms will make a fair return on their investments. An independent regulator, however, still depends on a clear policy with the basic outlines, norms, and rules determined by the government. Regulators have different scope for rule making, but the key is that they should be operating within a well-specified, stable framework.

# The Specific Problem of Regulation in Brazil

Brazil enjoyed a certain advantage in the area of regulation as a result of its slower start at privatization. By the time Brazil began privatizing public utilities, outside experts, particularly at the World Bank, could help provide information about the experience of privatization and regulation outside of Brazil. In the early 1990's, privatization programs were designed with less attention to and awareness of the need for good regulatory design.

As a result, in part, Brazil's regulatory agencies follow many of the World Bank's recommended "best practices" in terms of design. Directors for all of Brazil's key regulatory agencies enjoy considerable formal autonomy, with staggered terms and joint executive and legislative participation in their appointments. Directors may not be fired at the whim of the President, or of the relevant minister (Mines and Energy in the case of oil, gas, and electricity). The key regulatory agencies derive their budgets from users' fees (in the case of telecommunications) and special taxes (telecommunications and energy), and the funds are earmarked especially for the agencies. In certain other respects, the design is less than "best practice," but not significantly so

(OECD, 2001). For example, the agencies operate independently, but they are formally part of their relevant ministries. In addition, the agencies have to play both the roles of regulator and mediator as they mediate appeals from firms in the sector in the first instance. If, however, they cannot resolve the dispute, the firms have recourse to the courts. Brazil's lower courts are highly politicized, while its higher courts have a tendency to be responsive to the executive. Thus, the appeals process in Brazil is less than ideal.

The formal design of the regulatory agency, however, tells only part of the story. Regulatory agencies still face significant challenges in Brazil. For one, there is the simple fact the whole enterprise of establishing regulatory agencies is new and runs counter to the entire history of government involvement in the economy. Executives and business people have observed that legislators do not fully appreciate what it means to have the government make the basic rules and then have an agency operate at arms-length to enforce those rules. It is not simply a question of losing access to patronage resources, which clearly is an issue for many Brazilian politicians. But, it is also a conceptual problem of understanding that firms cannot be manipulated to serve political or social welfare ends. Instead, social welfare goals are served through greater efficiency and productivity and as a result better, more affordable service. This is particularly obvious, for example, in the telecommunications case -- arguably the most successful public enterprise privatization in Brazil and one of the best telecommunications privatizations in Latin America.<sup>5</sup> In that case, access for lower income individuals grew substantially as installation charges felt dramatically.

But higher income users and anti privatization politicians who long had access to phones complained about tariff increases and the failure of ANATEL to stop them. According to some reports, President Cardoso himself blamed ANEEL for the 2001 energy crisis (Rufin, n.d.). To side step ANEEL, he set up an alternative group, the Crisis Management Team, that made a number of recommendations, most of which point to strengthening the role of ANEEL. In short, as long as these sentiments persist, there will be strong elements with the political system and the bureaucracy that look to re-establishing control over the new agencies.

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<sup>&</sup>lt;sup>5</sup> Amaral and Calmon, 2002 have argued that ANATEL is a special case and that other regulatory agencies are far less likely to perform as well.

The newness, and as a result fragility, of this institutional structure makes the agencies highly dependent on the quality of their directors (Amaral and Marin, 1999). To date, the various agency directors have been relatively successful in preserving their independence and have generally received praise from outside observers. But this dependence raises a concern: it is hard to find qualified agency employees and managers without strong connections to either the government or the privatized SOEs. When new regulatory agencies are created, the staff needed come directly out of the pre-existing department, such as DNAEE for ANEEL, or out of the SOE or former SOE, such as with Petrobrás and the ANP (Rufin and Romero, n.d.). It is less of an issue in cases like the privatization of Telebrás, because in that instance the SOE was broken up into multiple units, each of which might make claims on the regulatory agency, but competing against other, equally powerful claims. In the electricity and oil cases, significantly more monopoly/oligopoly power was left in place by the reform, with the attendant risks that newly privatized SOEs may wield undue influence.

A final general concern about regulation in Brazil is that there are subtle limitations on their independence, separate from the key aspects of formal design noted above (Amaral and Calmon, 2002.). The first stems from the government's human resources policy. In short, agencies seeking to fill positions need prior authorization. Therefore, agencies can be undermined if the government refuses to give the agencies authority to hire sufficient personnel to meet their needs. This has been particularly hard for ANATEL for example, which has been significantly understaffed during its existence. A second, perhaps greater, concern comes from the fact that the agencies' budgets come from independent sources, but they still pass through the legislative appropriations process and still require "liberation" by the executive. That is, agency budgets operate like all other budget processes in the federal government. The legislature passes the budget, but the executive retains the discretion over whether and when to disburse the resources. Thus, a government seeking to pressure the agencies has an important mechanism for doing so. This last issue is particular relevant, given the limited commitment of the new government to privatization.

The Challenge of Regulating Oil and Electricity

The general issues discussed above help to understand the performance of the regulatory agencies to date. In both cases, the relevant agencies, ANEEL in electricity, and ANP in oil, have received generally positive appraisals, but both have also had problems. ANEEL's biggest difficulty is that it was created after privatization had already begun. Establishing an effective regulator when private actors are already on the ground is exceptionally difficult. Establishing it when the government lacks a clear policy is even more so. Thus, ANEEL's performance to date cannot be fairly blamed on either its independence or on the competence of its staff.

In fact, in certain areas, ANEEL has performed admirably (Rufin and Romero, n.d.). It has resisted government pressures on issues relating to exchange rate risks and it has honored the letter of the contracts on issues pertaining to tariff increases despite consumer complaints and government concerns about inflation. It has also established clear guidelines on expansion of service and quality control, and set up public hearings on important issues to enhance transparency and accountability. On the other hand, firms have complained that the agency personnel's bureaucratic origins have led it to be excessively bureaucratic and rigid. This has been the case in particular in ANEEL's interventions in the wholesale market and in the regulation of wholesale tariffs. The ANP's executive director is Sebastiao do Rego Barros, a former deputy foreign minister who replaced David Zylbersztajn, former President Cardoso's son-in-law, in September 2001. The appearance of nepotism aside, Zylberzstajn had strong credentials in the sector and had a solid reputation. With less experience in the energy sector, Barros faces considerable challenges at the helm of ANP. The ANP has had to struggle with Petrobrás over virtually its entire existence, with questions raised, for example, over Petrobrás' apparent success in retaining rights to the most promising basins in Brazil. In sum, regulation is a very new creature in Brazil with an uncertain future. Like everything else discussed above, its progress depends on a sustained government commitment to building an effective regulatory environment.

**Conclusion: An Uncertain Path** 

Brazil's privatization program in the energy sector has advanced considerably since it began under President Cardoso, but it remains incomplete with imperfect regulatory supervision. Unfortunately, Cardoso, the most successful president *vis a vis* privatization, saw his second and final term end in 2002. Aside from general assurances on the continuation of reform in the energy sector, the Lula government has yet to demonstrate its commitment by action. Petrobrás remains an SOE with enormous power in the oil and gas sector, and thereby by extension in electricity generation. Electricity remains a mix of state and private ownership, with unsettled regulatory issues. Finally, the general regulatory framework is still fragile and dependent on executive will to preserve, promote, and strengthen it in the face of ongoing challenges to define its place in the Brazilian political economy. This paper concludes then by reflecting on the context in which the new government takes over.

### Public Attitudes to Privatization

In 1994, Fernando Henrique Cardoso came to power in a context of relative support for privatization. Fernando Collor had attached popular perceptions of state corruption to the privatization program, and early successes lent credence to privatization's claims of beneficial results. Since then, however, public attitudes toward privatization have become much more skeptical. Embraer, an early privatization success story, continues to shine, but the later privatizations are less impressive to the public. In the electrical energy sector, the public had strict rationing imposed on it as blackouts and brownouts threatened the country. Reservoir levels were at drastic lows -- in some instances 7 % of capacity. But, the public correctly perceived the problem as one of a lack of investment in the sector, not the drought.

Just prior to the 2001 energy crisis, customers experienced sharp increases in the tariffs they paid while ANEEL defended the adjustments as being in accordance with the concession contracts. In the meantime, large foreign energy firms announced plans to withhold investment, threatened to leave the country, and stayed away from auctions for hydroelectric concessions and prize firms like Copel. Even the telecommunications privatization raised concerns. The privatization of Telebrás yielded a number of very impressive results, but by 2002, the crisis in the telecoms

sector had hit Brazilian operators as well, with a number of firms leaving the country and existing operators demanding relief from the government. Thus, the performance of private firms in public utilities did little to convince the public that privatization was inherently better for them.

This shows clearly in public attitudes (Baker, 2001). By the late 1990's, public opinion had already become sharply polarized and highly salient. Of all the major reforms in the government's agenda, only pension reform yielded sharper polarization. In 1998, 45 % of respondents said that privatization was bad for the country, while 41 % said it was good. Opponents claimed as the number one reason for opposing that privatization hurt consumer welfare, especially in the form of declining service (as opposed to tariffs). Almost as many people mentioned that it gives assets away to foreigners who do not care about the welfare of the country. Supporters argued that privatization improves services, that the state was a poor administrator, and that privatization lessened corruption.

By late 2001, surveys suggested that privatization had become even more unpopular (Brazil Focus, September 21, 2001). A vast plurality called for Cardoso -- and his successor -- to terminate the privatization program: 42 %, while only 11 % called for its continuation. An additional 19 % percent indicated support for continuation, but only with many changes. The closest policy area in terms of calls for its termination was open trade, with 16 % calling for termination and 17 % calling for continuation. Even social security, the most visible and controversial of Cardoso's policy reforms, generated more supportive responses.

Public attitudes mirror many elite views as well. Twelve years into its neoliberal reform program, Brazil still does not have a real neoliberal constituency. Leading technocrats, as in the BNDES, have largely pragmatic concerns. The neoliberals in the Finance Ministry, led most visibly by Pedro Malan as the minister for the duration of the Cardoso government, were orthodox monetarists -- concerned about inflation, government finances, and monetary policy. They were not market champions, however, in the way of the Chilean technocracy. Officials in ministries like Mines and Energy or Industry and Commerce were very comfortable with government intervention and the use of industrial policy. Finally, politicians in Brazil only

reluctantly give up patronage and many of them continue to support government intervention in the economy. Finally, business attitudes are mixed. Business people have taken advantage of opportunities to participate in privatization and have responded adequately to trade opening. But large concentrations of capital continue to exist in many sectors, while Mercosur and the common external tariff have allowed a number of sectors to reintroduce protectionist measures. It is not likely that the business community would be a powerful lobby against some retrenchment of economic policy. These sentiments above manifested themselves clearly in the presidential election of October 2002 that ushered in the Lula government.

### The Prospects for Further Privatization with the Lula Government

The 2002 presidential election in Brazil was a genuine watershed moment for the country. Over the course of the campaign, polls consistently showed Luiz Inacio Lula da Silva of the Workers' Party (PT) in the lead, often by a substantial margin. Lula was the Workers' Party (PT) candidate who had competed and lost in the previous three elections. The PT historically had a dilemma in presidential elections in that Lula can draw on a loyal base of 30-35 % of the vote, but had great difficulty going beyond that. This result had taken Lula to the second round in 1989 and 1994, but not in 1998 when Cardoso won in the first round, with Lula in second. The party draws its most loyal support in the organized working class. This includes the metal bending unions of the São Paulo area that gave rise to the "new unionism" and the PT in the first instance, as well as white-collar workers, such as bank unions, educators, and public employees. In elections, the PT actually has performed better among higher income, better-educated voters than the mass of low income, uneducated voters. Lula lost to both Collor and Cardoso among poor voters.

The 2002 presidential election changed that pattern however. A host of factors combined to make the incumbent Cardoso and his followers highly vulnerable. Perhaps the most damaging element was a pervasive (and in fact deepening) antipathy to the market reform program of the Cardoso administration. Worsening economic performance combined with anger over successive corruption scandals and ongoing failures in the social policy arena to break support for the economic program. Thus, Cardoso and his administration were not able to take credit for important improvements, including price stability and valuable (and popular) reforms in health and education policy.

The campaign featured a polarized competition between Cardoso's anointed successor, José Serra of the Brazilian Social Democratic Party (PSDB), and a small number of plausible candidates offering stark criticism of the government's economic and social program. The extent to which the public had become mistrustful of the economic program was evident in the fact that both sides of the debate campaigned against its continuation. This put Serra in the difficult position of having to distance himself from a government he had been a part of while also promising the stability and security of continuity. This dilemma, coupled with his poor campaign skills, made it almost a foregone conclusion that Serra would lose badly to Lula in the final voting at the end of October 2002. The other opposition candidates suffered from a variety of credibility issues, leaving Lula as the only strong candidate opposing the continuation of the Cardoso coalition. In the end, Lula won with over 60 % of the vote.

The more surprising result was the PT's stunning success in the legislative elections. Historically, the PT has won a number of important municipal elections, including in major cities such as São Paulo or Porto Alegre. The party's share of the national legislature has remained relatively small. Lula's success in the presidential elections, however, carried over into the legislative arena as voters rejected parties associated with the Cardoso coalition. A number of opposition parties benefited, but in the final analysis the PT was the big winner. The change in the tally of seats is noted in Table 1 below. The result is critical. Most observers anticipated a Lula victory, but assumed he would have to operate without a majority coalition in the legislature — or at the very least without a super-majority necessary for constitutional amendments. The expectation is that Lula and the PT would face significant obstacles to effective governance. Instead, Lula took office in January 2003 with a strong majority for his coalition in both houses of the legislature and an enhanced capacity to actually implement his policy and programmatic preferences.

<u>Table 1: Election Results for the Brazilian Chamber of Deputies and Senate</u>

Chamber of Deputies

Party	Before	%	After	%
Brazilian Democratic Movement Party	87	17.0	74	14.4
(PMDB)*				
Liberal Front Party (PFL)*	98	19.1	85	16.6
Brazilian Social Democratic Party	94	18.3	71	13.8
(PSDB)*				
Workers' Party (PT)**	58	11.3	91	17.7
Progressive Party (PPB)*	53	10.3	48	9.4
Democratic Labour Party (PDT)**	16	3.1	21	4.1
Brazilian Labour Party (PTB)**	33	6.4	26	5.1
Brazilian Socialist Party (PSB)/PC do	16	3.1	22	4.3
B**				
Brazilian Communist Party (PC do	10	1.9	12	2.3
B)**				
Liberal Party (PL)/Social Liberal Party	27	5.3	27	5.3
(PSL)**				
Popular Socialist Party (PPS)**	12	2.3	15	2.9
Others	9	1.8	21	4.1
Total	513	100.0	513	100.0

<sup>\*</sup>Allies

<sup>\*\*</sup>Allies

Senate

Party	Before	%	After	%
Brazilian Democratic Movement Party	24	29.6	19	23.5
(PMDB)*				
Liberal Front Party (PFL)*	17	21.0	19	23.5
Workers' Party (PT)**	8	9.9	14	17.3
Brazilian Social Democratic Party (PSDB)*	14	17.3	11	13.6
Democratic Labour Party (PDT)**	5	6.2	5	6.2
Brazilian Socialist Party (PSB)**	3	3.7	4	4.9
Brazilian Labour Party (PTB)*	5	6.2	3	3.7
Liberal Party (PL)**	1	1.2	3	3.7
Popular Socialist Party (PPS)**	2	2.5	1	1.2
Progressive Party (PPB)*	2	2.5	1	1.2
Social Democratic Party (PSD)	0	0.0	1	1.2
Total	81	100.0	81	100.0

<sup>\*</sup>Allies

Source: Latin Focus, December 10, 2002 (available at http://www.latin-focus.com).

So what does that mean for the privatization and regulation of the energy sector in Brazil? At this writing, it is still unclear. The PT has been unapologetically supportive of a range of views from outright socialism to strong developmentalism. The PT is Brazil's only well-disciplined, grassroots-based party. In recent years, however, the more moderate wing of the Party has been able to convince the party members to accept a platform designed to move the party to the center and to assuage concerns among domestic business, and more recently on Wall Street. The result is what some call "PT light." The platform looked much like the Social Democratic platform of José Serra, with a pledge that if elected, no new privatizations will take place, but existing ones would not be reversed. Petrobrás would not be privatized under any circumstances. In campaigning in 2001, however, Lula did say that if the Cardoso administration did succeed in privatizing Furnas, he would reverse it.

<sup>\*\*</sup>Allies

Yet, Lula is caught in a bind. On the one hand, he has made a commitment to social justice, proemployment programs, and support for national industry. State owned enterprises are a critical component of that commitment because of their role as sources of employment, and because of their linkages to domestic businesses. At the same time, Lula needs to revitalize investments in the sector and any way he plans to do so will require foreign investment. The problem for Lula, however, is that Brazil's debt levels -- both external and internal -- are at high enough levels to raise concerns about their sustainability. This is no fault of Lula's. Rather, it is a sharp constraint he has inherited as a legacy of the previous government. Nevertheless, it is a legacy with which he must contend and he must do so with significantly less credibility and tolerance from the international financial community. To maintain inflows of capital, Lula will need to adhere to relatively orthodox economic policy or Brazil may begin to move in the direction of Argentina -- at least in economic terms.

Thus, it is easy to imagine that the government would not authorize further privatizations. The Party's internal democracy would make it very hard to violate one of the central principals of the national party. It is also plausible to imagine that the government would use executive authority to lean on and eventually undermine the functioning of the regulatory agencies in order to use the state owned enterprise as a political or policy instrument and in fact Lula has, at least rhetorically, declared his intention to do just that. Regulatory institutions in Brazil are simply too fragile to withstand a determined executive and the ones set up in the energy sector are already very weak. But it is also easy to imagine that the party would have a very hard time actively pursuing any real developmentalist or socializing agenda. The macro-economic constraints are tremendous.

On a final note, it is also not yet clear what the PT generally and Lula specifically think about the issues of privatization and regulation. As the opposition party at the federal level all the years of their existence, the PT has not really had to make hard choices. Thus, it is hard to know to what extent their centrist talk reflects real understanding of the concerns of private investors, the limits of federal government finances, and the needs of the energy sector in Brazil and to what extent it was just electioneering. In all likelihood, the sector under a PT government will feature considerable uncertainty, unpredictability and a very steep learning curve.

Whatever happens, it will have tremendous significance for Brazil's future and the future of the energy sector. Brazil is mired in the transition between one model and another. There is no clear coalition for a return to the old model, but the coalition for deepening the new one is not clear either any more. Privatization is incomplete in the energy sector, with potentially perverse consequences for the country. Regulatory agencies are a new phenomenon and their institutional integrity is not yet guaranteed. Finally, Brazil is facing the possibility of another financial shock. Where it goes from here depends heavily on who is leading it.

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