From Entrepreneurial State to Regulatory State?:
Brazilian Political Economy in the Wake of Privatization

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Abstract

In the 1990s, fundamental policy shifts appeared to re-orient Brazilian political economy from one of the developing world’s most protectionist and closed economies to a poster-case of late twentieth-century neoliberal opening to global economic forces. One of the most visible transformations in this process was an ambitious program of “privatizing” a wide range of state-owned assets, with the goal of extracting the state from directly controlling firms and commercial transactions. “Privatization” altered, but did not remove, the state from deep embedded-ness within productive firms. State capitalism was replace by regulatory governance and state participation in capital markets. This paper proposes to highlight the shift in the state’s economic governance that accompanied financialization. Targeting the state’s role in protecting investors and consumers, two distinct regulatory realms serve to categorize these changes: those of capital markets and of highly networked public utilities. The paper’s innovation is to look across sectors and types of regulation to highlight the commonalities of regulatory structure that have shifted the terms of state economic intervention.
In the 1990s, fundamental policy shifts re-oriented Brazilian political economy from one of the developing world’s most protectionist and closed economies to a poster-case of late twentieth-century neoliberal opening to global economic forces. One of the most visible transformations in this process was an ambitious program of “privatizing” a wide range of state-owned assets, extracting the state from direct control of firms and commercial transactions. The changes required important reform of how companies functioned within the economy and how the state interacted with firms. While the program transferred the state’s manufacturing firms to private ownership, changing the governance structure of public utilities required addressing both capital structure and regulatory framework. Formally, state economic governance shifted from entrepreneurship toward regulatory stewardship. This perspective suggested that equal protection of stakeholders – investors, consumers and the state – would receive priority over protection of production.

This interpretive essay proposes to examine anew the shift in the state’s economic governance that accompanied changes in the political economy regime in order to identify common regulatory principles and vulnerabilities across different sectors. The new framework


2 The paper’s underlying original intent was to explore the political economy regime change from the perspective of the current political crises in Brazil, which affects all of the actors in this paper. The paper does not offer an exhaustive review of all financial and regulatory governance; neither does it offer policy or ideology prescriptions. Two important issues that would constitute essays other than this one are the distributional implications of the of the paper e change in the Brazilian business environment and the results of refocusing state economic activity towards social policy, or investment in human capital (social infrastructure of education, education, public health, etc.) after the achievement of economic stability. On the latter issue see Edmund Amman and Werner Baer, “The Illusion of Stability: The Brazilian Economy
of economic regulation faced three overarching challenges. The first was to build regulatory capacity that was independent of state and political interests. Then, state “capture” of firms and other stakeholders to support political goals was the most complex of the challenges; it operated through the imposition of extraneous requirements with respect to capital structure and industrial policy. The third challenge was to rein in state rent seeking. For ease of exposition, the paper addresses regulatory evolution in capital markets and four selected major public utilities sectors, each with dedicated regulatory agencies:

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<th>Sector</th>
<th>Regulatory Agency</th>
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<td>Capital markets</td>
<td>Comissão de Valores Mobiliários</td>
<td>CVM</td>
<td>1976</td>
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<td>Electricity</td>
<td>Agência Nacional de Energia Elétrica</td>
<td>Aneel</td>
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<td>Petroleum &amp; natural gas*</td>
<td>Agência Nacional de Petroleo</td>
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<td>Telecommunications</td>
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<td>Highways &amp; railways</td>
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* Although economists do not typically include petroleum as a public utility, Brazilian authorities regulate the sector according to the principles of utilities and include it within their *serviços públicos*.

After a stylized history of the Brazilian “privatization” and regulatory program of the 1990s until about 2010, a brief section presents a survey the construction of regulatory capacity across these economic sectors in light of both their common goals and diverse circumstances.

under Cardoso,” *World Development* 28, no. 10 (2000). Further, its emphasis on governance practices precludes other important regulatory realms such as environment, money, human rights, etc. Although not the subject of this essay, firm capture of the state and consumers also routinely pushed back against regulatory effectiveness. Other highly regulated sectors, that have been at least partially privatized, such as water and sanitation, are not discussed. (It is not clear that including them would add to the substance of the findings.) The Banco Central do Brasil also enhanced its regulatory and management functions with responsibility for the privatization of banks owned by the individual states. The specificities of banking and monetary regulation argued against their inclusion in this paper. “De-statization” is the direct translation of the original Brazilian term; it is a more accurate term (even if awkward in English.) This end date reflects the current uncertain state of Brazilian political economy. One of the possible future uses of the paper is to aid in an understanding of the extent to which constructing the substantially new regulatory structure helped to establish the framework for the corruption and political crises of the late 2010s.
The remainder of the paper explores how these factors challenged the transition between political-economy regimes. Successive sections explore the use of the state to capture interests from other actors by imposing requirements with respect to capital markets and industrial policy, and the lure of state rent seeking. The paper concludes that, in many respects, governance reforms were more akin to shape-shifting than to fundamental change. They were important for re-vamping the form of state participation in the economy and for attracting capital to fuel economic growth. But, the state’s continued financial and political interests in specific sectors of production did not break from its past economic role. By focusing on state governance across both capital markets and the provision of utilities, this conclusion parallels and extends previous historiography on the organizational and financial effects for privatized firms. In closing, the paper raises subsequent questions about the interaction of this policy history with current circumstances.

**Privatization and Regulation in an Historical Nutshell**

The middle of the twentieth century saw a strong push for industrialization in Brazil. The state led that effort with an industrial policy that invoked a wide range of macroeconomic and business initiatives; one of its main tools was the formation of state-owned enterprises to provide basic manufactured goods and public infrastructure services that private entrepreneurs did not produce. State-owned firms operated within an environment that conflated the firm and regulator. Regulation of economic actors and institutional rules to govern the state’s economic actions were secondary to the imperative of industrial growth. These practices reached their limits by the third quarter of the century.

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Increasingly through the 1970s and 1980s, two inter-related features characterized the Brazilian economy. Economic crises – most proximately related to the shocks of global petroleum, financial crises and spiraling domestic fiscal imbalance that generated endemic inflation – saddled the state with a portfolio of state-owned enterprises that it could no longer maintain. These crises forced a re-assessment of state financing for industrial development. The exhaustion of import-substituting industrial policy had become obvious by the mid-1970s. The state’s production of commercially necessary industrial goods and the extension (or even maintenance) of physical infrastructure became financially infeasible. At the same time, global trends towards “neoliberal” open-ness advocated for lessened state presence in markets and the abandonment of activist industrial policy. State ownership of firms had been among the most visible targets of neoliberalism. The rewards for adopting, and costs of abstaining from, neoliberal policies increased as they as they became the global norm.

Although politically controversial, the Constitution of 1988 mandated privatization, codifying the trend that had been gaining traction since the late 1970s. The formal economic role of the state changed from providing basic growth-inducing goods and services toward regulating the private actors who provided those goods and services. After an uncoordinated

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9 The “Washington Consensus” was an informal set of guidelines, arising from the late 1980s and early 1990s, that encouraged emerging economies to re-orient economic institutions toward greater reliance on free market forces. These became the parameters by which multilateral financial institutions and individual states operated.

and anemic attempt to privatize SOEs in the 1980s,\textsuperscript{11} the national development bank (BNDES) organized the Programa Nacional de Desestatização (PND) to manage the divestment of state assets beginning in 1990. The individual states and some national SOEs privatized outside of the formal PND program, but often with its guidance. From 1990 to 2014, the privatization program issued 72 equity offerings for a total nominal value of US$88.1 billion, as well as US$18.1 billion of debt transferred and a bewildering number of concessions for hydroelectric generation, transmission lines, railways, telephone transmission, drilling rights, etc.\textsuperscript{12}

Despite much of the ideological rhetoric, the initial goal of privatization was financial: to attract capital investment to endeavors that the state could not support.\textsuperscript{13} The specific methods of privatization were complex, but they did not require the complete elimination of the state as a financial participant in industrial sectors. Techniques of privatization and economic trends resulted in financializing and obscuring the state’s role.\textsuperscript{14} When the state exited from firm ownership, it sold its equity shares in manufacturing firms and transferred full or partial ownership from state to private agents. Additional strategies included retaining state ownership in combination with making new capital investment available to private investors and issuing

\textsuperscript{11} From 1981 through 1989, 108 firms were privatized under the first legislative decree [Decreto 86215, 15July 1981] allowing for the process. These firms included a number that the state had taken over in order to avoid bankruptcy and manufacturing firms that did not fall within the state’s determination of national strategic interest. They tended to be small, and did not generate much revenue. PND AR 2002, p 4. Hyperinflation and uncertainty in the economic and political arenas explain the early inability of privatization to gain traction. [reword sentence: The state received criticism for the sales that did take place, as having settled for unfairly low prices. Marcelo de Paiva Abreu and Rogério L.F. Werneck, "Privatization and Regulation in Brazil: The 1990-92 Policies and the Challenges Ahead," (Rio de Janeiro: PUC Departamento de Economia, 1993); Armando Castelan Pinheiro and Fabio Giambiagi, "Brazilian Privatization in the 1990s," in Texto para Discussão #323 (Rio de Janeiro: IPEA, 1993).


\textsuperscript{13} This paper does not take a position on the distribution between financial and ideological motives driving the program.

\textsuperscript{14} Much research on the financial effects of these reforms shows positive results for the privatized firms. Previous scholarship has focused on the financial effects of privatization for firms, re-enforcement of interlocking business interests, increased concentration of production and its vertical integration and finds positive results for the firms involved. Another trajectory of studies demonstrates that privatization has partially fulfilled the goals of inserting modernized, technologically sophisticated Brazilian industry into the cutting edges of the globalized economy.
licenses (concessions) for the private provision of public services. Changing the balance of ownership structure to attract private capital was complex and required important changes to the firms involved, financial governance and regulatory procedures.

Both manufacturing and public services (public utility infrastructure and petroleum) were targets of privatization. Politics and finance motivated the decision to privatize commercial manufacturing firms prior to public utilities.\textsuperscript{15} Sales were organized by economic sector, with steel, fertilizer and petrochemicals leading the way. The Constitution and political caution constrained the universe of privatized firms. Petrobras,\textsuperscript{16} the iconic national petroleum firm, the national banks (Banco do Brasil and Caixa Econômica Federal) and Eletrobras (the national electricity producer) were exempt from privatization initially.\textsuperscript{17} With time, these companies also re-organized and expanded their universe of owners by public offerings of new equity shares, conceding access to specific assets, or partial transfer of shares to PND for sale.

Significant differences in the mode of privatization also occurred across distinct political regimes. The first democratically elected president of Brazil after the military regime, Fernando Collor (1990-1992), avidly privatized manufacturing firms as a tool for deficit and debt reduction.\textsuperscript{18} His impeachment in 1992 slowed the pipeline of new sales, until the presidential administration of Fernando Henrique Cardoso (1995-2002.) The Cardoso regime abandoned the emphasis on short-term deficit and debt reduction in order to focus on the longer-term strategies of shifting investment to the private sector and supporting conditions to insert

\textsuperscript{15} As discussed below, public services were privatized through concessions and required more detailed regulatory arrangements than commercial manufacturing firms. This they required more legislative and administrative preparatory work than manufacturers.

\textsuperscript{16} Revision of petroleum law in 1997 (Brasil, "Coleção Das Leis E Decretos " Imprensa Nacional (hereafter, cited as Leis) http://www2.camara.gov.br/legislacao. Lei 9478) mandated that a minimum of 50 percent plus one share (i.e., majority voting rights of remain with the state.

\textsuperscript{17} With subsequent changes in the program, the state currently plans to privatize Eletrobras. At least one study has identified that Petrobras and Banco do Brasil were two of the three profitable and productive SOEs in the Brazilian portfolio. (The third was the national iron ore company, Vale. --- cite) Petrobras was also exempt from national prohibitions against monopolies.

\textsuperscript{18} Abreu and Werneck.
Brazilian firms more strongly into the global economy. The sales of Vale (Companhia Vale do Rio Doce, the state-owned mining conglomerate), CSN (Companhia Siderúrgica Nacional, steel), Embraer (aircraft manufacture), and state-owned regional banks were important steps for global positioning. Repealing constraints on foreign ownership of privatized firms removed another impediment to global expansion. Licensing the concession of public utilities to private operators unleashed a further transfer of investment away from the state. By the end of the 1990s, investors had purchased the equity shares of most of the largest firms and in the subsequent decade private providers acquired concessions to provide a wide range of public utilities.

The Cardoso regime also re-defined the role of the state in economic governance to emphasize its regulatory capacity as an essential means for ensuring the success of privatization. Economic regulatory efforts focused on capital markets and public services. In 1995, a plan to re-structure the administrative apparatus of the state was articulated; and constitutional amendments abolished public monopolies, eliminated differences in the treatment of Brazilian and foreign firms, and opened the way for the state to issue concessions to private firms in petroleum, electricity, telecommunications and mining. These provisions both shifted the business environment and re-structured the traditional interweaving of foreign multinationals, small domestic firms and the state.

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19 With the exception of a few state banks and a capital increase for Vale, the sale of enterprises was largely complete by 2000. The state began the sale of Vale in 1997 and Banespa (the state bank of São Paulo) was sold in 2000.
20 The privatization program of 1990 had included privatizing public services. It was not original with the Cardoso administration; though they implemented the process.
21 Brazilians apply the term “public services” to the activities that, in English, are labeled “public utilities.”
23 PND AR 1995, p 7; Constitutional Amendments, operationalized by Lei 8987.
24 Andrea Goldstein and Ben Ross Schneider, "Big Business in Brazil: States and Marketing in the Corporate Reorganization of the 1990s," (Workshop on Brazil and South Korea: Institute of Latin American Studies,
Attracting private capital to industries and firms that provided basic public utilities – such as electricity, telecommunications, highways, ports, etc. – offered challenges beyond those faced by the capital goods firms in steel, petrochemicals and fertilizers. Public service industries provide essential services underpinning production and commerce, and their consumers include both individuals and all participants in the business world. Important components of the sectors rely upon complex distribution networks and are not responsive to free market dynamics; they are natural monopolies. Once a network for providing a service is available, the incentive for a competitor to build a parallel network is minimal. In addition to the networked nature of these industries, other common characteristics are that they rely on asset-specific inputs, benefit from economies of scale and require long-term investment to produce transitory goods and services. These structural features combined with the legal protection of the national oil company as a monopoly has led Brazilian policy makers to regulate petroleum by the same criteria as public utilities.  

To address these concerns, concessions that licensed the private provision of public services were structured to allocate gains from economies of scale and cost minimization across all stakeholders: the business entity and its shareholders, consumers and the state. The regulatory structure that accompanied the concessionary regime sought to coordinate complex technological requirements and to ensure that regulated activities responded equally and impartially to the interests of all stakeholders. The fundamental task of regulatory authority


Brazilian analysts tend to include petroleum as an infrastructure, rather than commercial, sector. See for example Paulo Valois Pires, A Evolução Do Monopólio Estatal Do Petróleo (Rio de Janeiro: Editora Lumen Juris, 2000).

Lei 8987; Velasco Jr; Carlos Kawall Leal Ferreira, “Privatização Do Setor Elétrico No Brazil,” in A Privatização No Brasil: O Caso Dos Serviços De Utilidade Pública, ed. Armando Castelar Pinheiro and Kiichiro Fukasaku (Rio de Janeiro: BNDES, 2000), 196; Andrea Goldstein and José Claudio Linhares Pires,
was to prevent one cause of market failure – the ability of a provider to equate its private benefit with the “public good.” Stakeholders looked to regulators to provide stable transparent rules, expectations, and effective pricing standards. Investors and consumers alike needed confidence in the coordination mechanisms at each stage of the production and distribution systems.

In the energy (electrical and petroleum/natural gas) and the railway-transport sectors, state-ownership had embraced vertical integration of production and distribution. Public utilities had combined production of the good or service with its distribution. However, regulating production involves fundamentally different concerns than does the regulation of distribution. With ownership separated from regulation, de-verticalization also occurred: the ownership of each function was disaggregated. Brazilian regulators concerned themselves with competitive practices in newly privatized production (electricity generation, telephones, petroleum drilling, etc.) by providing for competitive concession auctions for new production facilities and for privatizing some existing facilities.

In contrast, natural monopolies characterize the distribution of infrastructural services. These services require sophisticated coordination and responsiveness to connect regional and local networks of electrical grids, cell networks and landlines, pipeline development, railways/highways/ports among different providers. The underlying common requirement for

28 Breaking up the vertically integrated firms was mandated in 1995, with laws that applied to each sector separately.
29 Electricity can be transferred into a transmission grid, petroleum into a pipeline, freight and personal transport into railway/highway systems and telephones into the general population without distinction between how the products operate.
30 An agency with responsibilities for enforcing competitive practices exists (the Conselho de Defesa Econômica, CADE.) Public utilities regulatory agencies took on responsibilities for their sectors because of the perceived ineffectiveness of CADE. [source]
distribution networks was to provide open access with non-discriminatory pricing for consumers. The role of competition in these activities appeared in the practice of auctioning licenses to private providers. A variety of arrangements emerged. In selected cases, assets for distribution and services did not change: Petrobras retained its existing pipeline network, the state only gradually conceded the operation of rail lines and highways, and it retained responsibility for long-distance national and international telephone services. In electricity, local distribution of electricity to consumers was privatized through concessions to local monopolies, while Eletrobras and state-level governments retained long-distance transmission.

**REGULATORY CAPACITY**

With the private provision of physical infrastructure at the heart of the privatization program of the late 1990s, the common specific goals of regulation across all sectors were to: ensure non-discriminatory access to utilities, integrate geographic and technical networks, coordinate among regional natural monopolies to ensure that they did not take undue advantage of their market power, and incentivize expansion. The responsibilities that arose from these goals included managing the auctions that granted concessions, establishing pricing parameters, coordinating intra-sectoral production and distribution, and maintaining the operational and financial independence of the agencies themselves.

Building regulatory standards and authority varied across the public utility sectors, and encountered steep learning curves. The major variables affecting regulatory effectiveness included timing, continuing equity participation by the state, administrative skill, competing regulatory pressure and foresight. Further, because of the tight control and (national, regional or local) monopolies of the previous regime, available personnel with the necessary technological and financial expertise also generally had pre-existing loyalties and perspectives

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that favored the formerly state-directed actors.\textsuperscript{32} As a result, operational and financial independence from political influence was a direct concern in establishing effective regulation. The electricity sector’s regulation was the most problematic among the public utilities.\textsuperscript{33}

Breaking up previously vertically organized SOEs separated generation, long-distance transmission and local distribution among distinct providers. Each segment of the sector entailed different regulatory concerns. Although many generating companies remained state-owned, this was the only part of the sector that could be organized along competitive lines. Long-distance transmission lines remained with the state governments, and local monopolies bid for concessions to provide for consumer distribution. Clear standards were not in place prior to the first privatizations. When Aneel began operating after the first concession for distribution (awarded to Escelsa in 1995,) the valuation criteria for the enterprise were unclear. As a result transparent pricing standards, incorporating the concessionaire’s return on investment, were not possible.\textsuperscript{34} At a more fundamental level, one of the basic responsibilities of Aneel was to forge state-level transmission and distribution networks into a national grid. The difficulties of coordination became clear in the interstate distribution crisis of 2001 (discussed below.) Overlapping issues regarding pricing with the other major energy sector, petroleum and natural gas, also hobbled regulation of electricity. In 2001 Aneel and the national Treasury, which had responsibility for consumer prices on gasoline, coordinated their energy pricing policies for the first time in response to the electricity crisis and the nearly simultaneous opening of Petrobras’s

\textsuperscript{32} Financial skills were particularly acute in order to accumulate the capital for large-scale investment projects. For some examples of the consideration of this problem with respect to electricity, see Marcos Rodolfo Kessler, "A Regulação Econômica No Setor Elétrico Brasileiro: Teoria E Evidências" (Universidade Federal do Rio Grande do Sul, 2006), 93-97.

\textsuperscript{33} Nuclear energy is regulated separately from other electricity generation, and the ownership of Itaipú Dam (which provides 25% of Brazilian electricity) is governed by an international state-ownership agreement with Paraguay.

\textsuperscript{34} Pires and Campos Filho, 289-90; Goldstein and Linhares Pires, 15-17; Kessler, pp 97.
natural gas pipeline from Bolivia.\textsuperscript{35} Continuing coordination of energy regulation remained erratic.

Regulating petroleum (and natural gas) shared many uncertainties with electricity, but also had added complications due to the commercial prospects arising from the discovery and exploitation of offshore pre-salt deposits and the continued overwhelming dominance of Petrobras.\textsuperscript{36} As with the public services, separating production, refining and distribution re-organized the sector horizontally, rather than vertically. The outcome had limited impact on competitiveness within these activities, since oil companies other than Petrobras showed little interest in activities outside of pre-salt exploration and production. The state remained the majority shareholder of Petrobras, and concerns about financial independence between state and firm also remained strong. This circumstance created the most severe example of a firm’s “capture” of its regulator to protect its interests. The ANP granted Petrobras two large preferential concessions in the pre-salt region\textsuperscript{37} as well as, in 2010, the guaranteed participation as lead manager in all pre-salt projects. The regulatory agency, also formed a trading company (Pré-Sal Petróleo, PPSA) that it owned and managed.\textsuperscript{38} This effort to protect the state’s financial interest in the pre-salt petroleum mediated between production and commercialization, and extended the state’s financial interest beyond its stake in Petrobras. The arrangement created a new opportunity for the regulator to regulate itself. Finally, although ANP became responsible

\textsuperscript{35} Goldstein and Linhares Pires, 21.
\textsuperscript{37} The first in 2001 was part of an arrangement by which Petrobras returned the rights to other unused areas back to the state; the valuation procedures for this concession were disputed.
\textsuperscript{38} Ministério das Minas e Energia. Brasil, Novo Marco Regulatório"Pré-Sal E Áreas Estratégicas (Rio de Janeiro2009), powerpoint presentation, 24; Luiz Cezar P. Quintans, Contratos De Petróleo: Concessão E Partilha: Propostas E Leis Para O Pré-Sal (Rio de Janeiro: Benicio Biz and Instituto Brasileiro de Petróleo, 2011), 99. Aneel also formed a trading company for electricity in 2004 (discussed below) A major difference with the electricity sector is that PPSA is a global petroleum trading company concerned with maximizing its earnings from profit-sharing agreements.
for development of the petroleum and natural gas sector, the responsibility of the Ministry of Finance for consumer price policies constrained the agency’s ability to balance sectoral capacity with financial requirements. In land transport, the Agência Nacional de Transportes Terrestres (ANTT, and prior to its formation, the Ministry of Transportation), which regulated concessions issued for highways and railroad lines, faced two major challenges. Coordinating containerized freight across different modes of transport presented operational bottlenecks. In particular, it was necessary to extend and improve the national highway system and to ease transfers between highway, rail and port. In the pre-privatization years, highways remained the purview of individual states, without coordination or standards for quality and maintenance. Creating and enforcing such standards was an early preoccupation of the ANTT. Its second major concern was to ensure transparency and non-discrimination in pricing. As was the case with Petrobras in pipelines and refineries, Vale had established its own major railway distribution capacity for its mining production; it was one of the most extensive railway systems in Brazil. The concessions for the rail lines remained with the company when it was privatized in 1997. Enforcing non-discriminatory pricing over this network required extending regulatory power to an entity that was separate from other sectoral actors.

40 The rail network has constituted a relatively small segment of the transportation system. On the restructuring of the federal rail system prior to privatizations and its separation into six regional networks, see Augusto Baptista Bretas da Fonseca, “Reformando O Setor Ferroviário No Brasil, Atores, Trajetórias,E Idéias Nas Políticas Públicas Para as Ferrovias (1996-2014)” (Mestrado, Universidade Federal Fluminense, 2017), Chapter 4. Ports had always included public and private operators, and some publicly port facilities were privatized; air transport has been slowly privatized and regulated separately from land-based facilities.
Telephone communications, regulated by the Agência de Telecomunicações (Anatel) had the smoothest and most autonomous experience with privatization. Prior to issuing concessions, the agency had determined to separate landline from cellular service. Anatel had also mapped expansion plans prior to issuing concessions and had established the pricing parameters for interconnection between various segments of the network. Concessions did not grant exclusive rights to local service providers, but the number of service providers in each regional market was known. Local telephone service providers were separated from long-distance and international service, which remained with the national telephone company, Embratel. Pricing agreements on local service subsidized the long-distance and international lines, and was seen as a form of protective discrimination. At least as seriously challenging for Anatel was its failure to anticipate the explosive expansion of internet usage. Both capacity and regulation of usage have impeded the ability to optimize internet usage.

This stylized summary of building regulatory practices in the largest sectors that had previously been centrally managed reveals the specificity of problems with respect to pre-existing circumstances and technical requirements, even as regulation encompassed common goals. Both the state and firms engaged in behavior that impeded the efficacy of privatization.

**CAPITAL STRUCTURE**

While firms attempted to shape the outcome to respond to their interests over those of other stakeholders (firm capture), the federal government molded private business to respond to its policy and pecuniary interests. Requirements on capital structure, the continuation (by

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42 Privatization affected only telephone communications. Television and radio were not affected.
44 Ibid.
other means) of industrial policy and rent seeking were the most important means by which the state demonstrated its continued activism in the business world.

Regulating capital shared concerns that affected the public utilities with respect to non-discriminatory access, transparency and coordinating networks. Capital was different from infrastructure by virtue of its ubiquity. Its regulation was not limited to the privatized enterprises; it extended to all firms traded on the stock exchange. Further, the Conselho de Valores Mobiliários (CVM) had long been the regulatory body for the pre-existing stock market.

When issuing equity for the full or partial divestiture of state ownership, three constraints tethered financial capital to political controversies and defined the desirability of equity acquisition for private investors. These constraints were the requirement for the submission of auction bids only by pre-approved consortia who bid for controlling blocks of shares; expansion of the base of small investors through new investment vehicles for public employees (those covered by FGTS, the national employee benefits program) and newly formed pension funds of the largest SOEs; and the creation of a “golden share” in the largest SOEs that preserved special rights for the federal government. These actions responded to political pressure and the desire to ensure smooth procedures in asset transfers; but, they were incremental to the financial requirements of privatization.

Lazzarini (2011) and Mussachio and Lazzarini (2014) document the ways in which these actions financialized and obscured the state’s role in corporate governance. State-related entities participated in the acquiring consortia. These included BNDES/BNDESPar (the national development bank and its equity subsidiary), FGTS (the state-supported benefits fund) and SOE-pension funds. Directors of FGTS and SOE funds were drawn from the original parent-SOE and

45 Sérgio G. Lazzarini, Capitalismo Do Laços: Os Donos Do Brasil E Suas Conexões (Rio de Janeiro: Elsevier, 2011); Aldo Musacchio Farias and Sérgio G. Lazzarini, Reinventing State Capitalism: Leviathan in Business, Brazil and Beyond (Cambridge, Massachusetts: Harvard University Press, 2014).are among the most comprehensive explorations of the effects for firms of these requirements.
often appointed by the state. While the funds increased small-investor participation, they also contributed to opaque forms of state influence on privatized equity. BNDES’s role blurred the lines between privatizing agency and privatized firm. These participants gave new expression to traditional patterns of small tightly knit groups with close ties to the central state that controlled the economy.46

Mandating the composition of controlling consortia and constructing new mechanisms to intertwine state and business worked to ensure the financial viability of acquisition bids with significant domestic participation,47 revealed the identities of potential new majority owners, and may have supported the valuation of firms at the time of privatization. Complex consortia with diverse sectoral interests, interlocking memberships and tight ties to federal institutions also lessened risk for major business actors.48 Offsetting these benefits, the capital market changes constrained one of the major goals of the 1995 reforms: attracting new investors through dynamic capital markets. Doing so required protection of minority shareholders, and was akin to establishing the need for non-discriminatory protection for all stakeholders in the public utilities sectors.


47 Despite laws allowing foreign ownership, long-held and deep-seated political reaction against foreign capital created pressure to ensure domestic participation.

The CVM tackled this need by incentivizing stronger separation between ownership and management through enhanced standards of financial disclosure and accountability of share-issuing firms. Improved transparency and governance would generate longer-term expectations of increased liquidity and corporate valuation for all shareholders. In 2001, the CVM initiated tiered listing of companies on securities exchanges. Firms choosing to meet enhanced standards and frequency of financial disclosure and accounting practices attained a listing designation as “Level 1”; “Level 2” companies were those who met additional financial reporting standards and committed to adding outside directors (independent of the firm’s management or controlling ownership group) to comprise twenty percent of their boards of directors. The purpose of outside directors was to protect minority shareholders from conflicts of interests between the firm and its controlling owners. Omissions in these measures compromised the effectiveness of outside directors. In consortium-controlled firms, nothing protected outside directors from dismissal by the consortium and shareholder agreements could bind the votes of directors. Both possibilities diminished the potential of outside directors. Nevertheless, the more stringent Level 2 requirements applied to companies newly listing on the securities exchanges; firms already traded on the exchanges could opt to enhance their governance or

50 Lei 10303/01
51 Jairo Laser Procianoy and Rodrigo S. Verdi, "Adesão Aos Novos Mercados Da Bovespa: Novo Mercado, Nível 1 E Nível 2 - Determinantes E Conseqüências," Revista Brasileira de Finanças 7, no. 1 (2009); Rodrigo Ramalho Dubeux, "O Novo Mercado Da Bovespa E a Governança Corporativa" (Fundação Getúlio Vargas, 2001); Marina Oehling Gelman, "O Conceito De Conselheiro Independente Vigente Na Regulamentação Dos Níveis Diferenciados De Governança Corporativa Da Bm&Fbovespa" (Fundação Getúlio Vargas, Escola de Direito de São Paulo, 2012). Additional related details attached to the determination of levels. Newly listed firms (Novo Mercado) entered standards with commitments to Level 2 standards. All remaining firms continued to list on the traditional exchange.
52 Possible conflicts of interest could include such activities as entering into sub-optimal obligations with firms associated with the controlling groups, transferring funds among group members, etc.
53 Oehling Gelman.
maintain traditional standards.\textsuperscript{54} Criteria for a Level 2 listing were compatible with those of the New York Stock Exchange (and other global exchanges) which offered another venue for raising capital for a few of the largest recently privatized companies, such as Vale, Petrobras, Embraer and Bradesco.\textsuperscript{55}

The market valuation of companies entirely or partially sold to the private sector had motivated the capital market reforms. However, the provisions applied equally to all companies that chose to raise capital on the open market. The strategy was effective;\textsuperscript{56} from 2005[?] through 2009, 115 initial public offerings took place on the São Paulo stock exchange under the new standards, including the public utility concessionaires. The effect of capital market reforms favored large enterprises. Firms with dispersed or international share ownership (i.e., potential information asymmetries,) heavy needs for capital, or high profits had the most to benefit from financial transparency and corporate governance commitments, and hence to meeting the criteria for Level 2 listing.

In sum, capital markets regulation associated with privatization had two major effects. The provision for privatizing SOEs through consortia via operations within the capital markets served to protect the financial position of the state at the same time that it contributed to the deep embedded-ness of the state within the corporate structure. It also motivated accountability rules that tried to move towards transparency and accessibility.

\textsuperscript{54} Studies have tracked the performance of share prices of the different tiers, and have found ---
\textsuperscript{55} Although foreign ownership was limited to 40\% of voting shares, no distinctions in the nationality of owners was otherwise introduced. Offering shares (ADRs) in global financial markets began very early in the program. Usiminas, the first privatized firm offered 12\% of its total capital in international markets in 1994; other large steel companies followed.
\textsuperscript{56} Lazzarini, 95. Antonio Gledson de Carvalho and George G. Pennacchi, "Can a Stock Exchange Improve Corporate Behavior? Evidence from Firms' Migration to Premium Listings in Brazil," \textit{Journal of Corporate Finance}, no. 18 (2012). finds that these provisions have been efficacious for the firms adopting higher governance standards.
INDUSTRIAL POLICY

Selective continuation of industrial policy goals was another important dimension of the imposition of requirements extraneous to ownership responsibilities that accompanied privatization and regulatory reform. In addition to state entrepreneurialism, important components of “changing the playing field” for the manufacturing sector by means of industrial policy in the twentieth century had included long-term credit allocation from the national development bank, price controls and local-content provisions for domestic production. Instances of all these practices arose within the new regulatory frameworks across sectors. They demonstrated that the state had been unable, or unwilling, to distance its policy goals from business entities.

In 2004, the Política Industrial, Tecnológica e de Comércio Exterior (or PITCE) articulated a reformulated industrial policy, and re-stated the goal of strengthening Brazilian exporters while also promoting technology development and small-business endeavors. The policy consolidated a shift in targets from specific capital goods firms to “national champions,” who were going to represent Brazil in the global business arena. “National champions” included many fully or partially privatized firms (such as Vale, Petrobras and Embraer) as well as newly empowered private manufacturers (such as as Gerdau in steel, JBS in meat processing and Weg Equipamentos in machinery manufacture.)

BNDES remained the state’s stool for allocating capital on a preferential basis. For many of the largest and most controversial privatizations, the development agency’s role included issuing long-term loans to initially capitalize them as state-owned enterprises, managing the corporate restructuring and equity offerings of privatization with simultaneous equity participation, and then, granting additional loans for global expansion. With the new policy

57 On the design and inherent contradictions of PITCE, see Mansueto Almeida, "Desafios Da Real Política Industrial Brasileira Do Século Xxi," in Texto para Discussão 1452, ed. IPEA (Brasília: IPEA, 2009).
articulated by PITCE, the bank continued its established practice of issuing long-term credit for infrastructure projects, while it expanded equity participation in the entities through its subsidiary BNDESPar. Long-term loans to the fully or partially privatized firms with the strongest international portfolios and the complicated interwoven networks of state-private ownership accounted for BNDES’s balance sheet expansion to the point that the agency rivaled the World Bank’s lending capacity.\(^{58}\) With the exception of a small number of companies (notably, Embraer and Weg Equipamentos) the most successful global firms were commodity exporters. Privatized and minority-state-owned firms were the most heavily represented among the national champions.

As another legacy of traditional industrial policy, regulatory agencies assumed the responsibility for administering price controls (termed price regulation in the new regime.) Doing so entailed distributing the costs of inflation\(^{59}\) and the revenues of public services among consumers, producers and long-term investment. A combination of price caps and formulae for periodic adjustments established the practices by which distributors of infrastructural public utilities charged for consumption. Regulatory agencies determined price caps and the criteria for distributing concessionaires’ revenues to cover the costs of operation, profit retention, and investment in long-term improvement and extension of the service.\(^{60}\) Parameters for adjusting prices involved balancing consumers’ immediate interest in price minimization and firms’ interests in price maximization with attention to long-term investment in the quality and quantity of service. Each of these variables became subject to negotiation with new concessions

\(^{58}\) Transfers from the Treasury, generated by domestic bond issues, funded the expansion. To date, the extent to which traditional development banking activities have been displaced has not been addressed; neither has the influence of the close networks between the ownership consortia and BNDES investment strategy been quantified.

\(^{59}\) Prolonged very high inflation rates (reaching 2700% per annum in 1993, and ranging from 100% to 1100% per annum for all other years from 1980 through 1994) had embedded the issue deeply into all aspects of Brazilian behavior and expectations. (FGV/Conjuntura Econômica, “Igp-Di (General Price Index),” IPEAData, http://www.ipeadata.gov.br/Default.aspx. Accessed 17 May 2018.)

\(^{60}\) Pires and Campos Filho, 285.
and at price guideline re-setting periods. Maintaining consistent pricing criteria that all actors perceived to be fair challenged all regulatory agencies.  

Dwarfing the experiences of other sectors, electricity had the greatest difficulty with maintaining non-discriminatory pricing standards. After undefined pricing practices in the earliest electrical distribution concession, Aneel established more formal criteria. Distributors had the ability to pass on the full costs of inflation to consumers, allowing them to retain benefits of productivity gains, for the first pricing period of five years (until 2003-04.) This provision gave incentive to early concessionaires to expand and improve the distribution network. After the initial period, consumers were to share in productivity gains, by limiting consumer price increases to rates lower than the inflation rate. However, with the first rate revisions, Aneel unilaterally invoked a different basis for determining the distribution companies’ costs than had been the case for the privatization valuations. This experience was the most notable of Aneel’s inconsistent pricing decisions. In addition, each firm negotiated individually for rate adjustments. Uncertainty and prolonged litigation resulted from the inequities arising across concessions. Investors interpreted these actions as a lack of transparency and an exercise of arbitrary powers on the part of Aneel, and they became increasingly reluctant to build the electrical system.

Price caps determined the ability of distributors to pass price increases to consumers, and the need to control pricing between each segment of the sector created similar rate adjustment and cost-basis concerns in generation and transmission. In these segments of the sector...

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61 de Castro, 233; Pires and Campos Filho.
62 The extremity of pricing problems in electricity overwhelms, but does not diminish, the problems related to non-discriminatory pricing in other activities, such as railways, energy pipelines, and telephone services.
63 Kessler, 94-95.
64 Kessler, 97-101.
electricity network, real costs increased at rates greater than inflation. As an outcome, neither transmission nor generation capacity increased sufficiently to meet Brazilian needs. In 2001, when drought caused major supply shortfalls in the southeast and northeast regions of the country, these inadequacies were the primary contributors to a nationwide energy crisis. The industrial-powerhouse state of São Paulo and poverty-ridden Pernambuco suffered severe droughts, and the failure of interstate transmission caused periodic rationing in both areas. Reforms to the regulatory system attempted to respond to these problems in 2004. Among the changes in response to the 2001 crisis, a state-owned trading company formed within Aneel. This new SOE removed price competition for distributors’ supply by eliminating the spot market for generation (Mercado Atacado de Energia.) Newly introduced state-run auctions for supply created, as unintended consequences, new distortions among consumers in close geographic proximity with different distribution companies. Further, consumer prices for electricity continued to increase more rapidly than general price indices after 2004.

At the same time that complaints about pricing discrimination and opaque decision making plagued Aneel’s efforts to coordinate different components of the sector, the agency began to use price as a tool of federal social policy. A complex and uneven array of taxes and surcharges on basic energy rates in order to subsidize new facilities, expand rural electrification, subsidize an array of groups such as small-scale distributors, low-income

65 Since transmission remained a central state-directed function, the disputes played out in the generation segment of the sector.
66 Generation capabilities in these regions had not matched the increases in demand, and the transmission network was unable to move electricity from surplus to deficit locations. (Kessler, 93.)
67 Ibid., chapter 5.
consumers, alternative source providers\textsuperscript{69} etc., appeared. Rather than accepting the costs of providing for these beneficiaries as components of national social programs, they became built into the cost structure of the electricity sector. As a result, in 2005, taxes and surcharges accounted for almost 39\% of electric rates. (As a point of comparison, the analogous figures in Portugal and Britain at the same time were 6-7\%).\textsuperscript{70}

In sum, insufficient coordination, opaque inconsistent pricing practices and the use of consumer prices to fund an array of specific social policies hobbled pricing practices in electricity.

Establishing “local-content” standards\textsuperscript{71} was the third aspect of protective national industrial policy that remained in place and transferred to regulatory agencies in privatized sectors. The agencies for electricity, telecommunications\textsuperscript{72} and petroleum imposed significant local content requirements when issuing concessions. As with preferential development bank lending and setting price standards, the externalities fomenting ancillary development justified local-content standards. Regulatory authority, rather than legislative action, determined the acceptable levels of local content.\textsuperscript{73} The needs for infrastructure, support goods and services, and technological development in the very large construction and expansion projects of electricity transmission improvement and in the pre-salt segment of the petroleum sector

\textsuperscript{69} Hydro-power plants generate between 80\% and 85\% of total electricity; one-quarter of the total comes from the Itaipú plant.

\textsuperscript{70} Kessler, 142.

\textsuperscript{71} Local content requirements committed to using as specified proportion of domestically produced goods and services as input to their operations.

\textsuperscript{72} Anatel’s initial local-content requirements, on the concessions for landline services, resulted in its loss of credibility among potential foreign providers; these constraints later loosened for cell service concessions. (Sérgio Abranches, "Privatização, Mudança Estrutural E Regulação: Uma Avaliação Do Programa De Privatização No Brasil," in A Crise Mundial E a Nova Agenda De Crescimento, ed. João Paulo dos Reis Veloso (Rio de Janeiro: José Olympio Editora, 2000), 358.)

\textsuperscript{73} Bryan W. Blades, "Production, Politics, and Pre-Salt: Transitioning to a Psc Regime in Brazil," Texas Journal of Oil, Gas and Energy Law 7, no. 1 (2011): 50-51. While the CNPE and the production-sharing law define the term “local content” with respect to pre-salt operations, the ANP has the authority to determine the level of the requirement.
dramatically increased the potential impact of mandated local content provisions.\textsuperscript{74} Perhaps the most obvious example of invoking local-content standards occurred with the first contract for pre-salt rights, Petrobras’s exclusive concession, provided that local content of goods and services the development phase of the project would be 37 percent during the exploration phase and 55-65 percent during production. These terms established a high threshold at the same time that they demonstrated the continued political interests in using the petroleum industry as a tool of domestic industrial policy.\textsuperscript{75} The standards for determining and calculating local content remained murky.\textsuperscript{76} In a nominally open market, commitment to maintain local content became problematic because the policies constrain profit-maximization goals of private firms.\textsuperscript{77}

**Rent Seeking**

Attempts to capture additional profits from companies operating in within the regulated privatized services constituted rent seeking by the agencies and by the state. Loosely defined responsibilities and the nominal financial autonomy of agencies combined to support rent seeking. Some of the most common charges of rent seeking arose in the context of procedures for profit sharing, the portion of firm profits that remit to the regulatory agency as its return on public utility provision and service. Aneel and ANTT faced complaints about discrimination

\textsuperscript{74} Drilling equipment, platforms and refineries, shipping freighters, pipelines and servicing provisions are the major capital-intensive items subject to local content regulation, as well as sources of skilled job creation. Perhaps the most contentious application of local content considerations have occurred with respect to the efforts of Brazilian industry and the Navy to develop floating production, storage and offloading (FPSO) facilities, rather than contracting for existing technology and production from British and South Korean providers.

\textsuperscript{75} Luiz Cezar P. Quintans, *Direito Do Petróleo : Conteúdo Local : A Evolução Do Modelo De Contrato E O Conteúdo Local Nas Atividades De E&P No Brasil*, Coleção Direito Do Petróleo (Rio de Janeiro, RJ: IBP : Freitas Bastos Editora, 2011). The level of this commitment has since been disputed.

\textsuperscript{76} Almeida, Lima de Oliveira, and Schneider.

\textsuperscript{77} This paper does not investigate or speculate on the connection between local-content requirements and the current “Lava Jato” scandal linking many of the largest and consortia-controlled firms with Petrobras, the privately held construction industry and political operatives.
among electricity providers and railway operators as a result of ill-defined rules governing the allocations of costs and profits, which gave rise to rent seeking.78

Logic suggests that the most extreme rent seeking would occur where the rents promised to be largest, and the experiences within the pre-salt subsector of petroleum demonstrated rent seeking by both the federal state and a wide array of public-sector actors. As the production of petroleum from the offshore pre-salt layers of the seabed offered the possibility of launching Brazil into the ranks of major global producers in first decade of the twenty-first century, potential claimants for revenues multiplied and rent extraction by the public authorities became ever-more tempting while regulatory principles remained constant. Revenues to the state derived from concession fees, royalties and profit-sharing agreements.79

Rather than relying on federal allocation of funds, municipalities and states hosting the pre-salt operations bid for committed shares of the royalties. These created an incentive for a very few locations.80 In 2010 legislation, separate federal agencies laid additional claim to royalties for naval support and an environmental defense fund. Non-producing states and municipalities received a small portion and the federal government claimed the remaining thirty percent of royalty payments. Intergenerational wealth transfer toward future owners of the non-renewable resource (all Brazilians), which would have directed royalty payments toward human and social capital investments, was not recognized.81 Reflecting the contentious and political nature of

78 Kessler, 75; de Castro, 233-36.
79 Triner, "Regulatory Regimes for Petroleum Production in Brazil."
80 Production facilities were most notably in Campos dos Goytacazes and Macaé in the state of Rio de Janeiro, followed very distantly by towns in the states of Espírito Santo and São Paulo. Currently 79 percent of proven reserves are located in the deposits attributed to the territorial area of Rio de Janeiro (state.) (Agência Nacional de Petróleo, Anuário Estatístico (Rio de Janeiro: ANP, various), Table 2.4; Sérgio Wulff Gobetti, "Federalismo Fiscal E Petróleo No Brasil E No Mundo," in Texto para discussão #1669 (Brasilia: IPEA (Instituto de Pesquisa Econômica Aplicada), 2011 ). 
81 José Roberto Rodrigues Afonso and Sérgio Wulff Gobetti, "Rendas De Petróleo No Brasil: Alguns Aspectos Fiscais E Federativos," Revista do BNDES 15, no. 30 (2008). These provisions have not been implemented, as of April 2015.) On the theories and experience with intergeneration wealth transfer associated with non-renewable resources see Michael Ross, The Oil Curse : How Petroleum Wealth Shapes
these decisions, a subsequent re-specification of the royalty legislation shifted the allocation toward the federal government, and non-producing state/municipal governments, and challenges continued unresolved. Further, the state’s share of profits (profit-sharing agreements) became incremental to the concession fees and royalty payments. Other petroleum-producing nations using these arrangements accept profit-shares as full compensation for depleting the supply of a non-renewable natural resource, replacing royalties.

**CONCLUSION**

The record is decidedly mixed on the outcomes of the Brazilian state’s attempt to evolve from an entrepreneurial to a regulatory political economy regime. The state has shared, rather than shed, its entrepreneurial interests with the private sector. As regulator, the Brazilian state introduced a common structure to integrate the interests of consumer, producer and the state that applied across the capital market and public utilities. Folding its entrepreneurial interests into the regulatory function opened the way for potential (or real) conflicts of interest. Inconsistencies across and within sectors demonstrated the steep learning curve involved in shifting political economy regimes at the same time that they revealed the continuing pull of using regulation for ancillary policy purposes.

The regulatory state was able to continue the entrepreneurial state’s industrial policy practices of preferential capital allocations, price controls and local-content requirements, and to engage in rent seeking. The capital market became the institution that mediated ownership.
In order to do so, reforms to the regulation of capital markets introduced standards to enhance the rights of minority shareholders through increased financial transparency and accountability. At the same time, the continued presence of the state took a multiplicity of forms, with the result of increasing the opacity of its financial and regulatory interests. With the exception of structuring stock exchange listings, all of these actions responded to political exigencies, rather than the requirements of shifting the share of entrepreneurial capital to private ownership. This exploratory essay has exposed inconsistencies and weaknesses in what was, otherwise, considered a fundamental shift in political economy regime of one of the world’s largest economies. Focusing on the most dramatic examples demonstrates the difficulty and fragility of political economy regime change. The paper does not offer policy prescriptions. Rather, it informs and lays the groundwork for more ambitious historical questions: As an empirical counter-factual, could the increased capitalization that underpinned the growth of Brazilian “national champions” in the global economy have been possible without state participation, both with regard for its role in capital structuring and its regulatory actions?; and did building a regulatory state, while retaining characteristics of the entrepreneurial state, establish conditions conducive to Brazil’s current political economy scandals?
References


