

Political interference and regulatory resilience in Brazil

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Abstract

Governments face a fundamental tradeoff between regulatory independence and control. Attempts of interference have the effect of reducing the system's level of commitment and credibility. On the other hand, an administration runs the risk that the autonomy delegated to regulators might be used to pursue outcomes that may harm their interests. This tradeoff is particularly relevant when there is an alternation of power with the arrival of a new political elite with different preferences. This paper uses data from a 2016 survey on regulatory governance applied to Brazilian regulatory agencies. This data is compared to a similar survey performed in 2005. The new survey results turn out to be surprisingly similar to those of a decade earlier, suggesting strong resilience of regulatory agencies despite significant attempts at political interference by powerful presidents. The factors explaining the resilience of regulatory governance in Brazil lie in its broader institutional endowment, which moderates the effects of executive interference.

Keywords: alternation of power, institutional change, institutional resilience, political interference, regulatory politics.

1. Introduction

This paper provides an analysis of the evolution of regulatory governance in Brazil over a period that followed the alternation in power of the political elite in 2003. This afforded the opportunity to analyze the agencies' governance in action, as the new administration sought to conform the regulatory system to their own views. The alternation of groups in power is an integral part of the democratic process and even of nondemocratic forms of government, so a well-functioning regulatory governance should be able to deal with the tensions and uncertainties that such events naturally beget, providing credible commitments that previously set contracts, rules, and understandings will be respected. But in practice, and especially in emerging economies subject to weaker institutions, making such commitments is often difficult.

Ennsner-Jedenastik (2016, p. 509) has shown, for example, using data on top-level appointments in western European regulatory agencies, that even granting formal independence does not assure effective autonomy as some control can still be achieved through the appointment of ideologically like-minded individuals. Importantly, however, this author notes that although actual governance often fails to match the theoretical ideal, it can "still create obstacles that make it more difficult to interfere in the day-to-day operation of an agency."

This is the context in which we describe the evolution of regulatory governance in Brazil from 2005 to 2016. During this period the regulatory system came of age as it confronted several economic and political shocks that

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tested its governance, which we measured at two points of that process. We find that although many of these shocks led to distortions and uncertainties that indicate the failing of governance, the system was sufficiently robust to adapt and self-correct. We underscore how the country's broader institutional endowments, characterized by strong presidential powers subject to effective checks and balances (Alston *et al.* 2016), provide the crucial context in which these results played out.¹

Correa *et al.* (2006) created the Regulatory Governance Index (RGI), which classified six federal and 15 state infrastructure regulatory agencies as to the overall quality of their regulatory governance. This index focused on the "inputs" for regulation of infrastructure industries, and not the performance of the agencies or the regulated sector. Those inputs are related to the *de jure* and *de facto* design, rules, constraints, and capabilities of the agencies, and focus specifically on autonomy (political and financial), procedures for decisionmaking, "tools and instruments" (including personnel), and accountability. The results found an adequate state of regulatory governance on average, yet with higher rankings for federal over state agencies, and with plenty of room for improvement along several margins across agencies.

A change in political regime due to the alternation of power can be a revealing test for effective regulatory governance when the incoming government seeks to make radical changes in the agencies' structure, process, and policies. Not every attempt to make such changes is undesirable or illegitimate. There are situations in which political interference can redress important problems that were not being addressed in the previous situation.

It is natural for a new democratically elected government to seek changes in regulatory policies. Appropriate regulatory governance, however, requires that these changes be achieved through previously accorded means, such as appointing new directors to the agencies at the legally predetermined time and following due process. The changes imposed in this fashion are, in a sense, electorally sanctioned, and do not violate the rule of law.

Not all forms of political interference are perceived as benign by investors or consumers, however. When they break the formal and informal rules and contracts under which the sectors previously operated, they can create uncertainty and instability that may lead to foregone investment and poor performance. Distinguishing which kinds of interventions are legitimate and which circumstances justify greater governmental protagonism is one of the great questions in the study of regulatory governance and, more broadly, in political theory.

The main objective of this study is to analyze potential changes in regulatory governance in Brazil over time and relative to comparable countries, based on data collected through a new round of the original survey on a current sample of regulatory agencies. In the intervening decade between surveys there have been reasons to believe that governance may have improved and that it may have gotten worse. On the one hand, this period has seen much learning by doing and correction of past mistakes. On the other hand, there have been several events where agency autonomy has been put under stress through attempts at political interference. As the RGI is composed of four different dimensions that cover a variety of aspects that contribute to governance, including autonomy (political and financial) and decisionmaking tools, both positive and negative elements are quantified, and it is not obvious *ex ante* what will be the net effect of the changes experienced in the past 10 years.

The main result we have found is that regulatory governance has not changed very much from 2005 to 2016. The average RGI across agencies is not statistically different in both periods. This is true for the overall index and for the four dimensions that compose the RGI (autonomy, decisionmaking processes, decision tools, and accountability). It remains true when we calculate a different version of the index that uses only survey questions that refer to *de facto* rather than *de jure* aspects of the agencies' governance. Even when we limit the analysis to the *de facto* index of only the federal agencies, we do not find a statistically significant change in any of the dimensions. The average index (which varies from 0 to 1, increasing in the quality of governance) increases slightly for all of the dimensions, except for "autonomy" where it falls from 0.42 to 0.40. Nevertheless, the difference is not statistically significant in any of these cases.

This result is surprising as the last 10 years have been an eventful period in the country's regulatory system. A series of events and practices suggest that the regulatory agencies have had their autonomy tested, as different administrations have tried to directly manage or indirectly influence regulatory policies and outcomes, for example through the budgetary process or through the procedure of directors' appointment. Several direct interventions by the Executive in agencies' procedures and decisions have raised concerns that the business environment in many important areas may have significantly deteriorated and could adversely affect investment levels and

consequently economic activity. Reports in the media and by academic studies have chronicled the tension. Given this picture, how can one understand the lack of change in the RGI?

A first factor to note is that when the 2005 index was made, the confrontation between the administration and regulatory agencies was already under way for at least two years. The first presidential term of President Lula began in January 2003, and already in the first months several policies to change the nature of the agencies were initiated, including an attempt to unilaterally change the inflation index in several concession contracts, the attempt to fire the head of the Telecom regulator, and the proposition of a new law to regulate regulatory agencies, as described above (Mueller & Oliveira 2009). All three of these initiatives and others that followed raised tensions and concerns over the future of regulatory governance in Brazil. It is thus safe to presume that when the first survey was undertaken, in 2005, the respondents' revealed perceptions reflected this climate. Having failed in most of its attempts to weaken the agencies' independence, the administrations eventually established a better working relationship with the agencies, for instance, by appointing new board directors aligned with the former president.

A second factor that can help to account for the lack of change in the RGI across periods, despite the evidence of political abuse in the media and in academic reports, is the fact most cases in which autonomy was challenged or violated, were met by opposing forces and checks in the other direction. The media, in particular, has been extremely vigilant and active in denouncing opportunistic behavior by different administrations in the regulatory domain. Similarly, the staff in several agencies has resisted such attempts. Brazil's highly independent judiciary has also played a role as a safeguard against potential violations of established rules. Together these checks and balances offer a formidable opposition to political abuse. This does not mean that these forces can impede every attempt of external actors to impose their preferences on regulatory agencies and their decisions, but their existence can contribute to a perception by survey respondents that captures not only the attempts against better governance, but also the reasons that make that governance more resilient.

In addition to analyzing the evolution of regulatory governance over time, this paper compares both instances of the RGI (2005 and 2016) to similar indicators created by the Organisation for Economic Co-operation and Development (OECD). The OECD has long pursued the recognition and promotion of sound regulatory judgment through studies, data collection, and indicators. These recommendations have motivated the 2013 update of the OECD's product market regulation (PMR) database, which covers all OECD countries plus some non-OECD countries, including Brazil (Arndt *et al.* 2015). In this paper, we are particularly interested in the indicator created in Koske *et al.* (2016), which focuses specifically on governance. This indicator covers several of the same network infrastructure agencies; electricity, gas, telecommunications, rail, airports, and ports.² We refer to this indicator, hereafter, as the "OECD index."

The interest in this paper is in the comparison of how Brazilian regulatory governance has changed from 2005 to 2016 using two instances of the same survey. In addition, we use the OECD data to create an RGI. This is done by finding questions in the OECD survey that are comparable to those in the RGI methodology and using the answers of those questions for Brazil to create an indicator with the RGI methodology. This produces an index for five Brazilian infrastructure regulatory agencies that can be compared to the respective indices from RGI (2005) and RGI (2016) to see if the use of different data sources affects the results. Although the surveys are comparable, they do have some differences. The OECD survey for example is essentially *de jure*, as the questions "do not capture cases where regulators conform to established practices but are not legally bound to do so through a formal or codified requirement." The RGI survey, on the other hand, includes several questions that refer to *de facto* situations that express facts about how regulatory governance takes place in practice, that is, not whether a rule exists, but whether it is actually enforced.

Finally, we use the data from both of the RGI surveys (2005 and 2016) to create indicators using the OECD methodology. These indicators can be compared to the official OECD indicator for Brazil to see if under this methodology the two datasets produce different results. The indicators can also be compared to those of all OECD countries as well as a group of non-OECD countries, which are included by Koske *et al.* (2016). The paper is organized as follows: The next section develops a critical dialogue with the literature on regulatory governance and political interference; the third section presents the methodology and the new RGI obtained with the new round of the survey and compares the results with the RGI obtained 10 years ago; the fourth section benchmarks the RGI against a similar index produced by the OECD for a large set of countries; the fifth section explores

qualitative evidence of political interference with Brazilian independent regulators; and in the final section we conclude the manuscript highlighting our main findings and their implications to the scholarship.

2. Regulatory governance and political interference

Regulatory decisions often have redistributive consequences. Potential winners and losers of those decisions, which can be public authorities, the private sector, and end-users, thus have incentives to pressure regulators for policies and outcomes. Independence involves rules of governance that allow the agency, as a referee among these stakeholders, to be objective, impartial, consistent, and free from conflict of interest (OECD 2016b). This insulation from undue pressure is achieved through elements such as secure tenure, legal means to enforce decisions, financial autonomy, and appeals to an independent judiciary (Correa *et al.* 2006). Achieving the right level and right kind of independence, without weakening accountability, is a balancing act that engenders tradeoffs and is one of the greatest challenges of establishing appropriate regulatory governance (OECD 2017).

Political interference is a very broad term covering a wide range of practices in many different forms of the relationship between politicians and bureaucrats. Usually political processes compel politicians to seek short-term gains, as they are subject to voters' and interest groups' demands. Effective infrastructure provision, in contrast, requires long-term planning, which makes infrastructure particularly vulnerable to political opportunism. Rouban (2003) outlines the politicization of regulatory agencies as the appointments, retention, promotion, or dismissal of regulators based on political criteria rather than merit. Party politicization is usually associated with the appointment of co-partisans to the board of directors of regulatory agencies by incumbent politicians and/or the removal of directors appointed by the previous administration.

Ennsner-Jedenastik (2015), for instance, argues that while granting formal independence to an agency may erect some institutional barriers to political interference, it also generates a strong incentive to appoint ideologically like-minded individuals to the agency leadership. By analyzing about 700 top-level appointments to over 100 regulators in 16 West European countries between 1996 and 2013 the author shows that individuals with ties to a government party are much more likely to be appointed as formal agency independence increases. In line with Maggetti (2007), who claims that the link between formal and actual independence is rather indirect, Ennsner-Jedenastik argues "higher levels of legal independence are thus associated with greater party politicization – a finding that casts doubt on the effectiveness of formal independence as a tool to reduce political influence in regulatory agencies."

The recent downward trend in infrastructure investments in developing and transition economies has been associated, at least in part, with the poor regulatory governance in those sectors (Henisz 2001; Henisz & Zelner 2002; Pargal 2003; Stern & Cubbin 2003). In countries with weak checks and balances, there are few constraints to the power of the executive. Weak political institutions may lead politicians to engage in corruption or influence regulatory agencies in order to benefit state-owned firms (Bortolotti *et al.* 2013). Furthermore, market-friendly legislation and well-designed contracts may be innocuous if regulators are poorly equipped or face the wrong incentives for appropriate enforcement. And privatization – as basic asset transfer – may generate very little welfare improvement if not combined with a robust legal framework, appropriate contracts, and good regulatory governance, broadly understood as the conditions for the enforcement of laws and contracts by regulators.

To attract private investment, both federal and state-level administrations in Brazil delegated regulatory authority to relatively independent institutions. Federal and state-level regulators were created almost at the same time and with very similar designs. The outcomes, however, were diverse. Prado (2012) and Pó and Abrucio (2006) partly explain this phenomenon through the history of previous sectorial bureaucracy. Mueller and Pereira (2002) also analyzed the institutional design of the five first national regulatory agencies focusing on the role of credibility. They claim that the tradeoff between credibility and control was key for understanding the specific regulatory institutions that were chosen. They show that the agencies created to regulate the newly privatized markets presented higher levels of political and financial autonomy as a credible commitment against political interference.

For the purposes of the present study, it is worth noting that investments in infrastructure industries have large sunk costs and a high degree of asset specificity. That is, their assets cannot be easily transferred to other lines of business. Important economies of scale are an issue, and a high political content exists because

infrastructure investments involve large numbers of consumers, stakeholders, and voters. Because investments are sunk and politically sensitive, politicians may see a chance to act opportunistically by requiring new targets or by imposing extra costs on regulated firms after investments are made.

Governments, thus, must solve the problem of credibly committing to secure property rights over time, and one solution to this dilemma involves delegating authority to independent regulators. By delegating powers to independent regulatory agencies, the executive assures private investors that it will not be able to arbitrarily intervene in the market and expropriate rents after investments are sunk.

Delegation is, therefore, a solution for an inter-temporal problem: By relinquishing some control, political actors can minimize the risk of expropriation (regulatory risk) and its effects on cost and availability of private capital. Stability of rules and credibility are key ingredients of this environment. The degree of delegation reflects the degree to which the executive, the legislature, or both seek to bind their hands in order to acquire credibility (Levy & Spiller 1994; Spiller & Tiller 1997; Gilardi 2005a, b; Majone 1996, 2000; Vogt & Salberger 2002; Wonka & Rittberger 2010).

One of the key aspects of the democratic process, however, is the alternation of power, which allows the replacement of old political elites for new ones, usually with different ideological preferences and political platforms. Regulators appointed by the previous administration function as institutional safeguard against abrupt and unexpected changes, as the new political elites often try to implement a distinct regulatory policy. Many regulatory rules, such as staggered appointments of directors, have the purpose of smoothing out the change brought on by a new government over a longer period so as to provide stability and reduce uncertainty. The new administration, therefore, may face a tradeoff between interfering in the regulatory process and respecting regulatory autonomy. Under such potential political conflicts between regulators and new elected politicians regulatory governance may suffer.

How do regulatory agencies maintain their autonomy in spite of potential interference from new administrations? Where does regulatory continuity come from?

“An institution,” March and Olsen tell us, “is a relatively enduring collection of rules and organized practices, embedded in structures of meaning and resources that are relatively invariant in the face of turnover of individuals and relatively resilient to the idiosyncratic preferences and expectations of individuals and changing external circumstances” (March & Olsen 1989, 1995).

That is, past institutions give rise to self-reinforcing dynamics that provide resilience against political interference. The reasons for this resilience are multiple. Duffield (2010), discussing the resilience of international organizations, lists four complementary reasons: first, uncertainty about whether the institution will be required in the future; second, institutions embody sunk costs and are thus usually easier to maintain than to construct anew; third, existing institution’s “assets” can be adapted for new purposes; and a fourth reason is what March and Olson (1998) term the “competency trap”: Actors will tend to buy into a particular institution by virtue of developing familiarity with the rules and capabilities for using them.

Whatever the reasons, as March and Olson (1998) observe, “institutions are relatively robust against environmental change or deliberate reform (...) the character of current institutions depends not only on current conditions but also on the historical path of institutional development” (p. 959).

Another relevant aspect is that the degree of political and financial autonomy of regulators cannot be understood in isolation from the other institutional features of a country. Levy and Spiller (1994), for instance, argue that good economic performance can be achieved only when regulatory governance and incentives are compatible with the institutional endowment of a country.

The first characteristic that distinguishes Brazil from most of other countries is that the executive branch instead of Congress initiates and coordinates Brazilian regulatory system. This is because the executive is the agenda-setter, due to its control of several constitutional and budgetary powers. In the Brazilian case a key question is whether it is possible to avoid potential executive action that would put in risk the regulated sector’s rights and investments.

In an environment like this, dominated by the executive, legislators have also delegated substantial powers to “nonelected” organizations such as the Judiciary, Public Prosecutors, Audit Courts, and so on. These institutions have acted as check to the executive, in the sense of increasing the costs of any discretionary action, both in terms of reputation and investors’ risk perception. Brazil has a very sophisticated web of independent accountability

institutions capable of constraining this powerful executive. The regulatory system, therefore, may work as a complementary accountability organization if the president tries to jeopardize investors or when investors act opportunistically. To sum up, it may not be a surprise to observe a great degree of institutional resilience from independent regulators despite attempts by the executive to interfere and downplay the independent role of regulatory agencies.

A similar resilience in face of change was found by Coslovsky *et al.* (2017) in the impact of labor legislation in Brazil when the country opened up its economy in the early 1990s. For many analysts the expectation was that this change would either induce a modernization of the country's rigid pro-worker labor legislation, which could hinder participation in the competitive globalized economy, or at least would lead to a *de facto* flexibilization, where lax enforcement and informal arrangements would allow adaptations and workarounds to the new rules. However, as these authors show, in Brazil neither of these outcomes prevailed and instead labor law rigidities remained very much capable of protecting workers' right, especially due to the reinforcing roles played by unions', labor inspectors', and labor prosecutors' "routine efforts to enforce good laws, extend weak ones, and undermine detrimental ones in ways that significantly improve labor practices on the ground" (Coslovsky *et al.* 2017, p. 79).

3. Political change in Brazil

In the Brazilian institutional environment, the executive holds several constitutional, budgetary, and agenda-setting powers, which grant the president the means to interfere with the regulatory agencies. In 2003 there was a replacement of Fernando Henrique Cardoso's administration, that had been the driving force behind the process of privatization and the creation of the regulatory system, by Luiz Inácio Lula da Silva's administration, which was suspicious of regulatory agencies. The new president claimed that regulators were too independent and, above all, insensitive to social demands.

There are allegations that many of the attempted interventions in the regulatory system by the Lula's administration upon coming to power in 2003 were potential ruptures to the established regulatory order. The new president reacted very strongly, for example, against the decision of the telecommunication agency (ANATEL) to raise cell phone tariffs, stating publicly that having been elected by voters he should have the power to decide on tariffs.³ After failing to reduce tariffs through direct negotiations with the telecom companies, the Executive pressured ANATEL to take unilateral action. The regulatory agency resisted the political pressure and upheld the new tariffs as established in the concession contracts.⁴

After the agency's refusal to comply with the Executive's demand to review the tariffs, the administration tried to directly interfere in the agency's governing body.⁵ The Executive pressured the head of ANATEL, Luiz Schymura, who had been appointed by the former president Cardoso, to resign before the end of his tenure. For several months Schymura refused to step down, resisting several forms extra-official pressure imposed by the administration. Eventually, however, the situation became unbearable and he resigned in early 2004, about one year before the end of his tenure.

According to Schymura (2018), "there were widespread complaints among senior members of the workers party (PT) government that the former government had insulated the agency against future administrations. They finally realized that they could exploit a loophole in the legislation that mandated tenure for agency directors but not its president. Because of the language used – directors instead of president – the President insisted that I could be downgraded to the post of director and neutralize me." After leaving ANATEL, Shimura returned to his position as professor and head of the Brazilian Institute of Economics at the Getulio Vargas Foundation (FGV).

Lula further realized that his hands were institutionally tied by regulatory rules and he proposed a new set of regulatory laws that would redesign the system strongly reducing the level of regulatory autonomy. An entire new bill was drafted, put up to consultation and sent to Congress. The most controversial issues proposed by the government was to transfer from the regulatory agencies to the ministries of the power of concession and the creation a management contract that would establish goals and punishments for the agencies when those goals were not met. The main concern was that those reforms would significantly reduce agency autonomy and weaken governance.

The Dilma Rousseff administrations also brought about new potential interferences on independent regulators. For instance, Rousseff issued two decrees authorizing the minister of transportation to appoint and/or dismiss temporary (interim) board member of ANTT (land transport agency)⁶ and ANTAQ (waterway transportation agency)⁷ without prior consultation or authorization of the Senate.

Most of the examples of political interference in this paper refer to the Workers' Party because this was the party in power when both surveys whose data we use were undertaken. But the propensity of government interference is general and not exclusive to that party. In 1999, during the second term of President Cardoso, a similar attempt to intervene in regulatory policy took place. The President's party had been responsible for the privatization program in Brazil and for the creation of the independent regulatory agencies, so the political climate was very favorable toward the agencies (Mueller 2001, pp. 633–634). Nevertheless, when the specific consumer price index used to revise telephone service tariffs went up more than expected, due to a large currency devaluation, the government sought to substitute that index for a different one that was less sensitive to changes in the exchange rate. This was a clear violation of the concession contracts, yet the President feared that the sharp rise in tariffs would feed into inflation, at a time when Brazil had just recently managed to overcome an extended period of hyperinflation. This stated intention by the government led to an intense public debate over whether such a change would be justified even if it did break the contracts. In the end the government backed down and left the original index. Yet the event shows that extemporaneous political intervention in agency policy can take place under political parties of any ideological bent.

Nevertheless, not every attempt to make regulatory changes is undesirable or illegitimate. There are situations in which political interference can redress important problems that were not being addressed in the previous situation, such as when the regulation of electricity in Brazil was taken over by an Executive-appointed committee, sidelining the effective regulatory agency. Brazilians were surprised by a series of power blackouts and energy shortages in 2001, which led the Cardoso's administration to interfere in the energy regulatory sector by instituting nine months of compulsory energy rationing on household and businesses. The executive-appointed committee, which temporarily overruled the regulatory agency's authority (ANEEL), decided that consumers must cut consumption by 20 percent or face rolling blackouts and unscheduled power interruptions. This intervention effectively leads to a solution the crisis.

4. Measuring regulatory governance in Brazil

4.1. Methodology for creating the RGI

The data to create the index were collected through a survey answered by a sample of 16 regulatory agencies in Brazil in 2016. Six of the agencies are federal, eight are state-level agencies and two are municipal regulators. Table 1 lists the sample and indicates which sectors each agency supervises.

The survey was applied during the months of June to October of 2016 through an online platform where the invited agencies, usually one of the self-selected board members of the agency, could enter their data and respond to a list of 83 different questions divided into four categories: (i) autonomy; (ii) decisionmaking; (iii) decision tools; and (iv) control and accountability.⁸ The questionnaire for the survey was practically identical to that applied by Correa *et al.* (2006), in order to allow comparability of the results and give a picture of the evolution of regulatory governance in Brazil.⁹ Figure 1 presents examples of survey questions from each subdimension. Most of the questions have a series of predetermined answers from which the respondent can choose one alternative. A few questions ask for numerical values. All possible answers have a predetermined number of points, which accrue to the agency's index if that answer is chosen. The points are such that each question varies from zero to one. We set the points for each answer based on the theory of regulatory governance, so as to reward "good" governance features and penalize "bad" features.¹⁰ The score for each dimension was simply the average of all the questions in that section, with equal weights. The general index aggregates the four subindices by a weighted average with equal weights (0.25) for each dimension. Finally, the index for each agency was rescaled to allow greater comparability across agencies.¹¹

Table 1 Regulatory Agencies in the 2016 Regulatory Governance Index (RGI)

Number	Name	Type/Location	Sectors
1	ANEEL – Agência Nacional de Energia Elétrica	Federal	E
2	ANA – Agência Nacional de Águas	Federal	W
3	ANTAQ – Agência Nacional de Transportes Aquaviários	Federal	Ports
4	ANTT – Agência Nacional de Transportes Terrestres	Federal	Tr
5	ANATEL – Agência Nacional de Telecomunicações	Federal	Com
6	ANCINE – Agência Nacional do Cinema	Federal	Cinema
7	ARSAE - Agencia Reguladora de Serviços de Abastecimento de Agua e de Esgotamento Sanitário do Estado de Minas Gerais	Minas Gerais (State)	W S
8	AGERBA – Agência Estadual de Regulação de Serviços Públicos de Energia, Transportes e Comunicações	Bahia (State)	E Tr Com
9	ARGESA – Agência Reguladora de Saneamento Básico do Estado da Bahia	BA	W S
10	ARSAM – Agência Reguladora de Serviços Públicos do Amazonas	Amazon (State)	S G Tr
11	AGERGS - Agência Estadual de Regulação dos Serviços Públicos Delegados do Rio Grande do Sul	Rio Grande do Sul (State)	Tr S E
12	AGEAC – Agência Reguladora dos Serviços Públicos do Estado do Acre	Acre (State)	E Tr S
13	ARTESP – Agência de Transporte do Estado de São Paulo	São Paulo	Tr
14	ARSAL – Agência Reguladora de Serviços Públicos do Estado de Alagoas	Alagoas (State)	Tr G E S
15	AGR – Agência Reguladora de Saneamento de Tubarão	Santa Catarina – Tubarão (Municipal)	W S
16	ARES-PCJ – Agência Reguladora PCJ (Bacia dos rios Piracicaba, Capivari, e Jundiá)	São Paulo – Americana (Muni)	W S

Sectors: Com, Communications; E, Electricity; G, Gas; S, Sewage; Tr, Transport; W, Water.

4.2. The results for the regulatory governance index for 2016

Table 2 displays the results of the RGI of 2016 for the 16 federal, state and municipal regulatory agencies. The four subdimensions that compose the index are also shown. As was the case in 2005, we found that the federal agencies had better governance than the subnational agencies, with the exception of the federal water regulator (ANA). The best-ranked agency overall was the federal electricity regulator, which scored significantly above all other agencies.

Figure 2 shows the RGI-2016 in a graph, which also indicates the mean value together with plus and minus one standard deviation. As in the case of 2005 there was relatively little variation across agencies, with only one agency above the one-standard deviation above the mean and three agencies below the one-standard deviation below.

The index was created by giving each agency points for features that indicate good governance. Yet because there is some subjectivity over how the points are awarded, it is preferable to interpret the index for a given agency relative to other agencies, instead of as an absolute value. In this sense the results of the final index indicate that overall the level of governance in Brazilian regulatory agencies is between medium and high, but with much room for improvement.

The results across the individual dimensions of the index show that on average the dimension which most penalizes the final index is that of control and accountability, which measures governance features that impose on the agencies checks and constraints from other actors and stakeholder, such as consumers, regulated entities, and other government sectors. In general, federal agencies have clear governance rules in this regard that, for example, require the use of public hearing prior to important decisions. This is less common, however, at the state and municipal level.

The dimension with the highest average score is that of decisionmaking, which captures the quality of governance features that determine the process through which decisions are made; that is, who initiates a proposal, who has voice, who can veto, and the path and venues which the decision must navigate. Here there is no

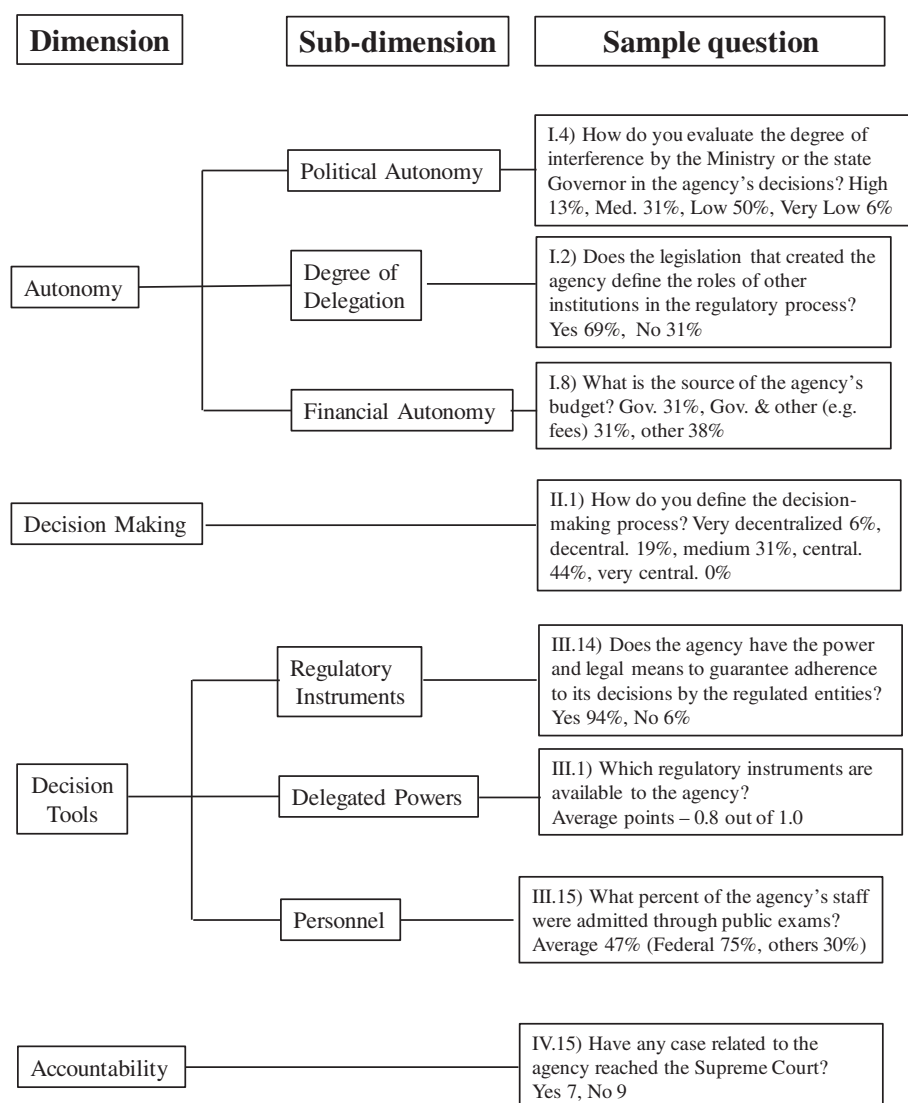


Figure 1 Autonomy: descriptive results of selected questions. *Source:* The complete survey is available upon request.

distinction between federal and subfederal agencies. Although ANEEL, the federal electricity agency, scored the highest, most other federal agencies were in the middle of the field.

In many occasions the independence of the agencies was tested through attempts by the Lula and Rousseff governments to pressure the agencies through the appointment, oversight, and budgetary processes. The results for the “Autonomy” subindex confirm these accounts. Most of the federal agencies score low on this dimension and the highest scoring federal agency is ANCINE (the cinema regulator). In the dimension of “decision tools,” on the other hand, the federal agencies do relatively well. These results confirm one of the general conclusions of this paper that regulatory governance in Brazil has improved or stabilized in terms of the more technical and bureaucratic aspects, but has done less well in areas that have political dimensions.

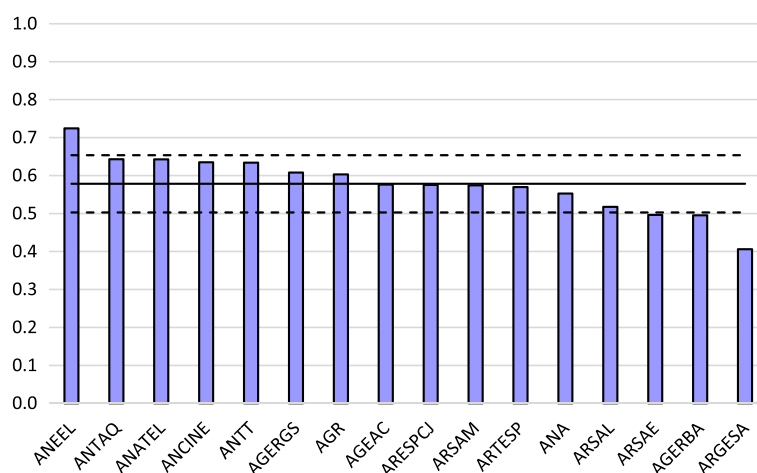
4.3. The *de facto* RGI

Criticism is sometimes aimed at indices such as ours, which are based on information about how a public organization operates, regarding the difference between what the law establishes that the organization should do and what it actually does. That is, respondents often give answers in the survey that reflect what the organization should do *de jure*, but which might often not coincide with what it does in practice. There is concern that *de jure* independence may not imply *de facto* independence. Maggetti (2007), for instance, in an in-depth study of

Table 2 Results for the 2016 Regulatory Governance Index (RGI)

Agency	Sector	Autonomy	Decisionmaking	Decision Tools	Account-Ability	RGI - 2016
Federal						
ANEEL	E	0.6446	0.8701	0.7116	0.6716	0.7244
ANTAQ	WTr	0.5979	0.6379	0.7138	0.6232	0.6432
ANATEL	Tel	0.5065	0.5743	0.8467	0.6428	0.6426
ANCINE	C	0.6767	0.5384	0.6695	0.6552	0.6350
ANTT	GTr	0.5536	0.6200	0.7270	0.6349	0.6339
ANA	W	0.5617	0.6510	0.5306	0.4679	0.5528
State/Muni.						
AGERGS	Tr S E	0.7274	0.7140	0.5719	0.4188	0.6080
AGR	W, S	0.7161	0.4971	0.7033	0.4956	0.6030
AGEAC	E, Tr, S	0.6604	0.8271	0.3466	0.4714	0.5764
ARESPCJ	W, S	0.7102	0.4628	0.7221	0.4057	0.5752
ARSAM	S, G, Tr	0.4476	0.8521	0.5178	0.4793	0.5742
ARTESP	Tr	0.4137	0.5754	0.6245	0.6659	0.5699
ARSAL	Tr, G, E, S	0.6061	0.6026	0.2414	0.6197	0.5174
ARSAE	W, S	0.4952	0.4993	0.5524	0.4394	0.4966
AGERBA	E, Tr, Com	0.3888	0.4966	0.5606	0.5354	0.4953
ARGESA	W, S	0.3933	0.2508	0.4254	0.5550	0.4061
Mean		0.5687	0.6043	0.5916	0.5489	0.5784
Standard deviation		0.117	0.160	0.157	0.095	0.075

C, cinema/movies; E, electricity; G, natural gas; GTr, ground transportation; I, irrigation; P, petroleum; R, railroads; S, sewerage; Tel, telecommunications; Tr, general transportation; W, water; WTr, water transportation. *Source:* Authors' calculations.

**Figure 2** The Regulatory Governance Index 2016 (avg. = 0.578). *Source:* Calculated by the authors.

16 regulatory agencies finds that the link between formal and actual independence is often weak. Formal independence is neither a necessary nor a sufficient condition for *de facto* independence.

In order to test whether our results suffer from these distortions we calculated a different version of our index which uses only questions in the survey that clearly refer to *de facto* issues. Whereas the full RGI contains information from 83 questions, the *de facto* index contains 28. Both indices are shown in Figure 3. In general, the results are very close, indicating that the *de jure* questions do not distort the index significantly. The correlation between both indices is 0.73. There are a few cases, however, where there is a noticeable gap between each version of the index. When the full RGI is above the *de facto* RGI, as in the case of ANTT (federal land transport) this indicates that the governance on paper is better than that which actually materializes in practice. On the other hand, when the *de facto* RGI is above the full index, such as in the case for ARSAL (the public service regulator

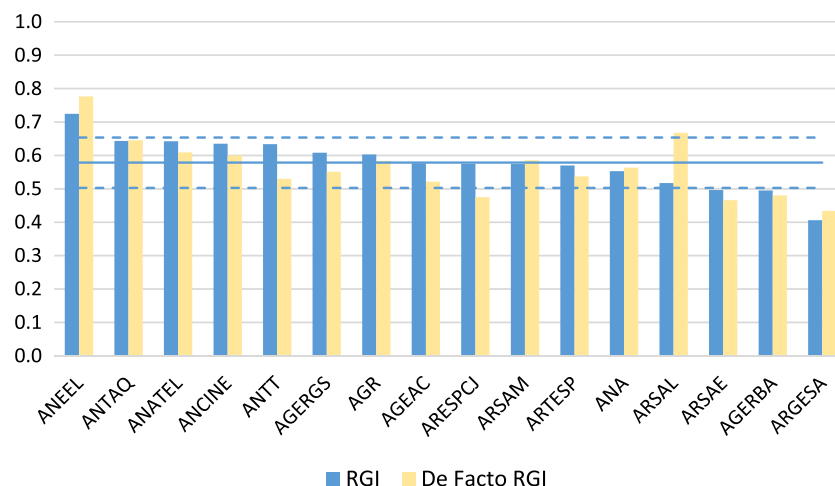


Figure 3 The Regulatory Governance Index (RGI) versus the “de facto” RGI for 2016. *Source:* Calculated by the authors.

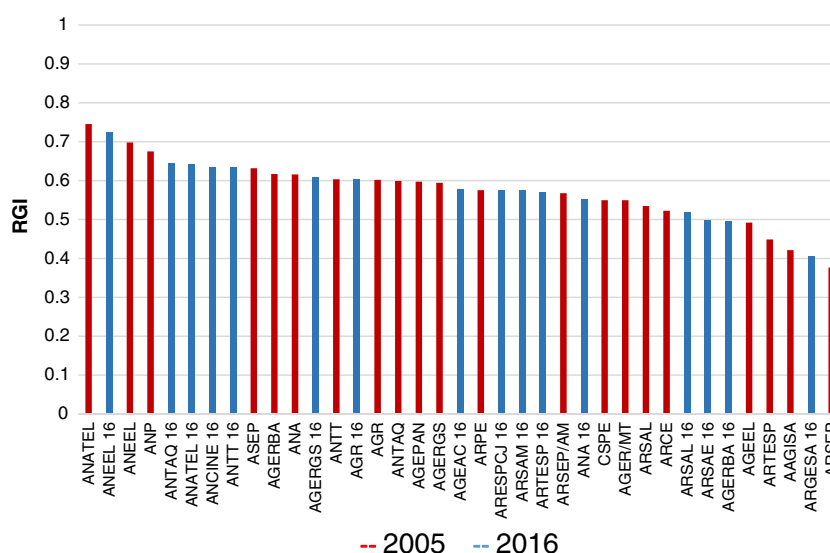


Figure 4 Comparison between Regulatory Governance Index (RGI) 2005 and RGI 2016. *Source:* Calculated by the authors.

for the state of Alagoas) and ANEEL (federal electricity) this implies that practice is better than paper. This is the case for only these two agencies in our sample, whereas the opposite effect holds for 10 agencies (other four cases are statistically the same in both versions).

4.4. The evolution of regulatory governance in Brazil from 2005 to 2016

Much has changed in Brazil and in its regulated public utility sectors in the more than 10 years between 2005 and 2016. During that period Brazil has undergone some boom years, periods of high foreign direct investment, then a prolonged economic depression, political crises, an impeachment, and much else. In 2005 the country's experience with regulatory agencies was still in its initial stages. Since then more agencies have been created and there has been significant learning by doing with several organizational and personnel improvements. There has also been much tension between the agencies, the administration, and other stakeholders.

Not all agencies that were included in 2005 are included in 2016, and vice-versa, but there is sufficient overlap, especially among the federal agencies to allow for a direct comparison. The two rounds of the index are shown together in Figure 4.

The graph shows that there is no clear distinction between the RGI of 2005 and 2016. There are agencies with high and low values in each of the years. This is confirmed by taking the average and standard deviation of the

index in both periods: 2005 mean = 0.5723 and standard deviation = 0.088, and 2016 mean = 0.5784 and standard deviation = 0.075. The means are statistically equal, so that on average there has been no change in the index over time. It may be that the overall average might be masking changes in the separate dimensions, which might cancel out. In order to investigate this possibility, we performed difference in means tests on the four dimensions in 2005 and 2016. The comparison shows that none of means of the individual dimensions are statistically different. This seems to indicate that regulatory governance in Brazil is remarkably stable over time. There remains the possibility that for individual agencies there might have been changes over time that are not captured in the aggregated statistics. Yet the pairwise comparison of the 2005 and 2016 indices for those agencies that took part in both surveys reveals that most agencies have relatively stable scores, though there are relatively large reductions in governance for ANATEL (federal telecom) and for AGERBA (public utilities in Bahia). ANATEL had been the highest scoring agency in 2005 and went through some attrition with the federal government administration during this period. On the other hand, ARTESP (transport in São Paulo) shows a relative improvement over time.

Another concern is that the stability of the index could be a statistical artifact due to the small sample sizes, which produce high standard errors. Ideally, we would address this issue by increasing the sample size. Since we are not able to do this, an alternative is a test that responds the questionnaire randomly for 16 hypothetical agencies and then calculates the RGI for this pseudo-sample. We can then do this 1,000 times to get an average sample average that can then be compared to the original (actual) sample average. If these are both statistically equal, then the stability from 2005 to 2016 will likely have been an artifact of the small sample size.¹² The result of this test rejects that the averages are equal, so that we can have some confidence that the stability result is not driven by the large standard errors.

5. Benchmarking the RGI against other regulatory governance indices

5.1. Calculating the RGI for Brazilian regulatory agencies with OECD-2013

In this section we use the same RGI methodology of the previous section to calculate a RGI using the OECD data used in Koske *et al.* (2016), which calculates an index to measure governance of network infrastructure agencies in the OECD. We do this by matching as many questions as possible from both datasets.¹³ It covers only federal agencies, as state agencies did not enter the OECD study. For this indicator the values vary from 0 (less effective governance) to 1.0 (most effective governance). Note that the OECD data is for 2013 and the RGI data is for 2005 and 2016.

Overall the results, shown in Figure 5, reveal a relatively similar ranking, perhaps with the exception of the electricity regulator (ANEEL), which exhibits a considerably higher value with the OECD data than it does with

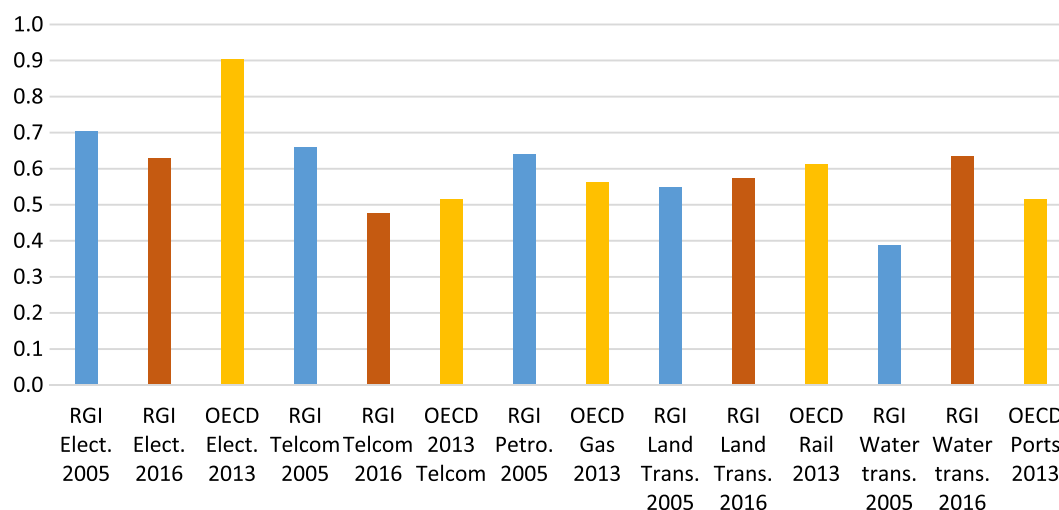


Figure 5 Comparing Organisation for Economic Co-operation and Development (OECD) data and Regulatory Governance Index (RGI) data through RGI methodology. *Source:* Calculated by the authors.

the RGI data. The most important point is that the results show that the datasets are comparable despite their different nature. If the OECD index were systematically different than the RGI indices this could raise concerns about the methodologies or interpretation of either approaches.

5.2. Calculating the OECD index using RGI 2005/2016 data

In this section we use our data for 2005 and 2016 to replicate the index created by Koske *et al.* (2016) to measure regulatory governance in OECD countries with data from 2013 PMR indicators and based on the OECD best practice principles. We expanded the results that they report by adding some non-OECD countries for which there were data in their database, including Brazil.¹⁴ In addition, we used data for Brazil from 2005 and 2016 to create an additional indicator for Brazil, shown as BRA-RGI (RGI) in order to see how different sources of data compare within the same methodology. This comparison indicator was created by finding questions in the RGI survey of Brazilian regulatory agencies that captured approximately the same information as the Koske *et al.* (2016) survey. Thus, there are three indicators for Brazil in each of the figures.¹⁵ The Brazil indicator uses the Koske *et al.* (2016) data from 2013 (same as all other countries), but the Brazil-RGI indicator uses data from 2005 or 2016.

The Koske *et al.* (2016) indicator varies from 0 (the most effective governance structure) to 6 (the least effective governance structure). Figure 6 shows the aggregate OECD index for all countries. The subdimensions of regulatory governance in this study were derived from seven principles for the governance of regulators put forth by the OECD best practice principles for the governance of regulators (OECD 2014). These seven principles are: (i) role clarity; (ii) preventing undue influence and promoting trust; (iii) decisionmaking and governing body structure for independent regulators; (iv) accountability and transparency; (v) engagement; (vi) funding; and (vii) performance evaluation.

The most noteworthy result from the perspective of this paper is that Brazil is the lowest (most effective governance) overall according to all three Brazil indicators. If it were only the two BRA-RGI indicators that were low, then one might suspect that the result is driven by data incompatibility. But the fact that both datasets give proximate values suggests the comparison is valid. Both the 2005 index for Brazil created with OECD data and

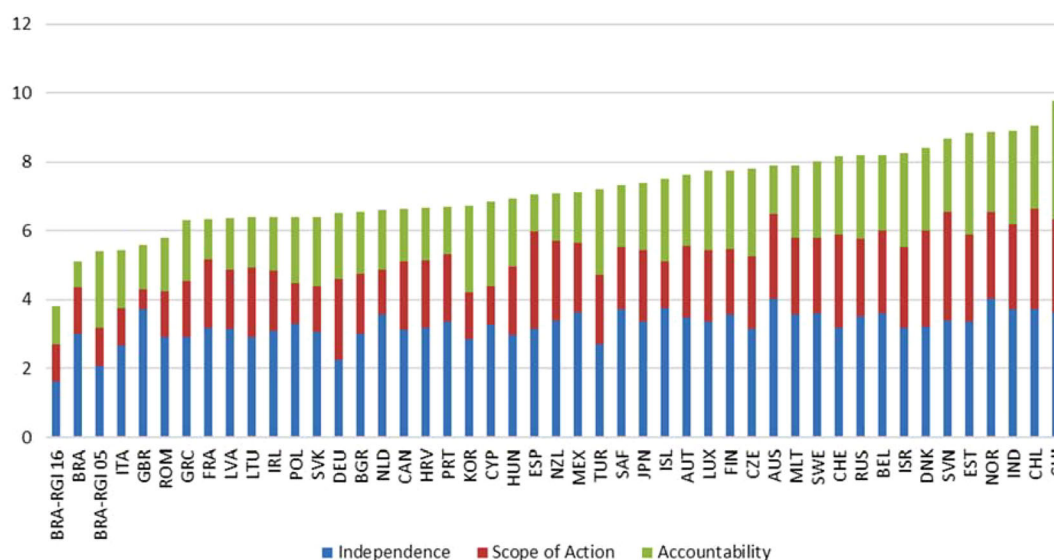


Figure 6 The Organisation for Economic Co-operation and Development (OECD) Governance Indicator including Brazil. *Note:* Lower values indicate more effective governance. *Source:* Calculated by the authors using data from Koske *et al.* (2016), Correa *et al.* (2006) and from our own 2016 survey. The Airport regulator for Brazil did not exist in 2005 and was not included in the 2016 Regulatory Governance Index (RGI) survey. The mean value for other Brazilian regulators was used in its place in 2005 and 2016. The Petroleum regulator for Brazil (ANP) was not in the 2016 survey and was replaced in that year with the mean of the other sectors.

the 2016 index created with RGI data give very similar results, though the breakdown across dimensions is somewhat different. The 2016 RGI improves on the 2005 RGI, especially in the area of accountability.

A second noteworthy result is that Chile is classified by the indicator as the least effective governance, which stands out because the Chilean regulatory system is renowned as one of the best in the world. In another publication entirely dedicated to Chilean regulatory policy, the OECD praises “governments capacity to ensure high-quality regulation,” though it does note areas that need improvement (OECD 2016a). Koske *et al.* (2016) do not comment on why Chile was so badly ranked. Possibly this is due to the fact that the indicator only captures *de jure* aspects and often *de facto* realities can show a very different picture.¹⁶

The results for the RGI 2005 and 2016 once again show that there is significant stability in regulatory governance in Brazil. In the overall index and also in the independence and scope of action subdimensions both RGI indices have very similar values. Only for accountability was there a significant improvement from 2005 to 2016 (which is due mostly to the Port and Rail sectors).

Another remarkable result is Brazil's placement toward the top of the range in most tables. One would typically expect a developing country such as Brazil, which rarely ranks well in issues related to governance and institutions, to be lower down in the tables when compared to OECD countries. Part of this anomaly might be due to the distinct nature of the data, as discussed above. But note that in most of the graphs the two RGI indices are usually quite close to the OECD Brazil index, where the data source and methodology match the other countries in the graphs ensuring their comparability. That is, even in the OECD study Brazil was well placed in the regulatory governance ranking.

6. Conflicts over regulatory policies in Brazil

The finding that regulatory governance remained relatively stable in Brazil for over a decade would seem to point to the conclusion that this was an uneventful period for the country's regulated sectors. This was certainly not the case. In this section we provide some examples of the conflicts that emerged as political interests sought to influence agency action and as safeguards contained in the agencies' governance and in the country's rule of law, tried to resist that influence. Many of these conflicts attained significant prominence at the time, and as a result regulation and regulated sectors were frequently in the news. The fact that these conflicts could arise and cause such disruption already indicates that regulatory governance was not working as well as could be expected. But that is only part of the story. It is important to see the full picture and determine how regulatory governance and broader institutions responded to the challenge of undue political interference. In many cases immediate corrective action emerged in the form of media exposés, interference by public prosecutors, and collective action by organized sectors of the agencies' bureaucracy. Thus, paradoxically, while politicization increased, there simultaneously took place a process of regulatory governance institutionalization. Meritocratic recruitment strengthened the junior echelons of the bureaucracy, oversight by public prosecutors improved, and media scrutiny became more robust.

What the stability of the governance index indicates, therefore, is not that nothing important happened during this period, but rather that the agencies' governance and the country's broader institutions were able to rise to the challenges put before them. The qualitative examples in this section provide more detail on how these opposing forces essentially cancelled out, leaving unchanged the perception of the quality of regulatory governance.

The discussion focuses primarily on issues pertaining to regulator independence. More specifically, we provide examples of several different strategies that were used by the federal and state executives during the 2005 to 2016 period as a means to affect regulatory agencies' actions, autonomy, and decisions: political appointments, strategic failure to appoint new directors in a timely manner, changes in the law to allow greater oversight by political principals, and control of agencies' budgets. These examples highlight forces that impinged on regulatory governance during the period we analyzed. While they illustrate the institutional weakness without which such conflicts and dissipation would not emerge, they also show the capacity of the regulatory governance and institutions to resist those forces. In some cases, the political strategies prevailed, in others the countervailing forces succeeded, and some cases the outcome is not so clear. More important than trying to figure out which force won on net, our point is that the collective experience has served as a period of trial and error and learning that

has provided a better general understanding of the *de jure*, and especially, *de facto* rules in the Brazilian regulatory sector. Our survey results indicate the perception that by 2016 regulatory governance had not improved significantly, but also had not deteriorated as one might expect from the examples that follow. Hopefully, in the longer term this learning will contribute to clarify the rules, coordinate decisions, and align expectations so that governance thus effectively improve.

6.1. Political appointments and strategic vacancies

Current analyses of regulatory governance have ignored some political strategies that governments pursue to interfere with agencies work via appointment policies, which proved to be central to understanding agencies' autonomy in Brazil. These include a host of practices to undermine agencies' effectiveness and independence. The executive branch may refuse to nominate replacements in agencies' directorships and may appoint cadres from political parties. While the latter strategy is not unusual, the former is overlooked. These practices are not typically factored in comparative work on regulatory governance. In Brazil, there are strong allegations that government administrations have made extensive use of such practices.

The refusal to nominate replacements for the board of directors may result in agency paralysis because a number of decisions require a vote by supermajorities. Vacant directorships may also compromise overall agency performance. A common practice has been the appointment of interim directors, which are not ratified by the Senate, do not enjoy the full prerogatives of a fixed term of office and can be replaced *ad nutum*. Similarly, the appointment of two or three directors simultaneously following a period of vacancy undermines the goals of enhancing autonomy envisaged with the adoption of staggered terms of office.

The appointment of members of political parties in the government coalition also compromises agency effectiveness. The resulting politicization of the agencies reduces their autonomy and independence, which leads to important reputational losses and to the generalized perception of increased regulatory risk. In theory, vacancies in agencies could be interpreted in a positive light: They might reflect a concern with over politicization of appointments. A weak administration may resort to this strategic behavior to undercut predatory pressures from coalition partners. This benign interpretation cannot be entirely discarded. But the actual level of politicization was high enough to affect agencies' reputation.

Figure 7 provides evidence of the extent of the vacancy problems (de Bonis 2016). While during the Cardoso years (Fernando Henrique Cardoso in the chart) vacancies were kept to a minimal – 14 percent – roughly equivalent to the time required for Senate hearings on appointments, during the Lula administrations vacancies surpassed the 55 percent. This means that the default mode of operation of a regulatory agency in the infrastructure area was functioning without a full board. This was extreme in the case of the oil and gas sector, where the regulator (ANP) had a full board only 21 percent of the time. The vacancies impacted differentially agency decisionmaking because all agencies had five directors whereas the ANTAQ had only four. This meant that this agency required two directors (a vacancy rate of 50 percent) to reach a binding decision. In three agencies – ANP, ANTAQ, and ANAC – vacancies undermined collective decisionmaking in a host of occasions due to lack of quorum. Vacancies occurred not only because of deliberate intention from the executive, but also because Congress refused to ratify appointees. Congress was not, however, the main factor accounting for vacancies – the Senate gave consent to appointments within two months in over 82 percent of appointments (and 90 percent of appointments within three months) (de Bonis 2016, p. 126). Between 1997 and 2014, that is during the office of three different presidents, the Senate rejected only three out of 208 nominations, while the executive withdrew 12, because it anticipated rejections, most notably under Rousseff, a rate of only 7.2 percent nonapprovals.

The use of staggered terms of office as an institutional constraint to politicization is limited in the Brazilian case. In the period 1997–2014, there was only one alternation in the party holding the presidency. Some presidential changes did not involve a corresponding change in the partisan composition of government. The litmus test for the independence of boards is the rate of completion of terms of office after a partisan change in the composition of government. Data on completion rates in two different scenarios (in the absence or presence of partisan change) show that 90 percent of the directors whose terms coincided with the presidential term of office concluded their time as anticipated, while only 76 percent of the directors that faced a partisan alternation did so. This difference can be accounted for by the fact that many such directors resigned. One third of directors

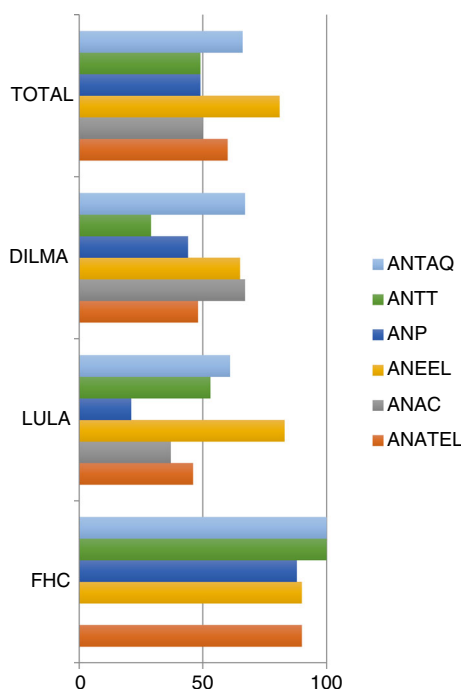


Figure 7 Percentage of months with no vacancies in agencies' directorships 1997–2014*. *Note:* *The value is calculated as the ratio for the months with full boards to the total number of relevant months. (Some agencies were created half way through the presidential term of office). *Source:* calculated from de Bonis (2016) dataset.

resigned after 2003.¹⁷ More important for the politicization of agencies is the party affiliation of directors. The number of directors who are registered partisans increased to 40 percent, up from 8 percent from 2003 to 2010 (de Bonis 2016).

6.2. Changing structure and process

Currently the Senate is discussing two comprehensive bills pertaining to regulatory agencies. The first – Senate bill PLS 52/2013 – was approved in September 2015 in the Constitution and Law committee. The bill includes provisions, such as performance contracts, which will undermine the regulatory agencies' independence. Performance contracts are used to evaluate whether an agency has met some predetermined targets and can lead to sanctions if the expected standards are not met. Although performance contracts can be a useful institutionalized means to assure accountability, they can also be used strategically to exert control over the agency. The distinction between the different uses made of the contracts depends on the details of how they are set up and enforced. In addition, the Senate bill calls for the creation of a supervisory council at the ministerial level to supervise agency work. The bill draws on the law of state-owned enterprises (*Lei das empresas estatais*, Law 13.303, 30/06/2016), proposed and passed by the Michel Temer's Administration. The law stipulates strict criteria for appointments for the directorships of state owned enterprises. Specifically, the law bars the appointment of senior members of political parties and/or trade union directors as well as elected members of the legislative branches to the boards of state owned enterprises. The bill introduces criteria that appointees should meet, including former relevant experience and technical expertise. In its current version, PLS 52 stipulates that Presidents are to appoint directors of regulatory agencies from a list of three options prepared by the board. In addition, strict time limits for vacancies are set.¹⁸ Unlike its original version, the new rapport vests the independent agencies with the power to grant concessions and does not require management contracts to be signed by the agencies and ministries. Furthermore the bill calls for strict criteria for impounding of resources earmarked to the agencies.

Despite some shortcomings the bill closed many loopholes in the current legal arrangement and addressed many of the problems associated with politicization and interference discussed in this topic. The strengthening of regulatory governance in Brazil requires reforms to prevent politicization and foster professionalism. Bill 52/2016

is a step in that direction. In fact, the degree of professionalization of regulatory agencies in Brazil has increased since they have been created, especially as a consequence of the competitive and meritocratic way personnel have access to this new professional career.¹⁹

6.3. Controlling agencies' budgets

Complementary to the overall loss of autonomy is the impounding of resources that reached its critical point in 2015, when the functioning of some agencies was compromised. Between 2010 and 2015 the federal agencies total budget was R\$ 57 billion. However, according to *Contas Abertas* only R\$ 19.3 billion were effectively executed. Under Rousseff's six years in government, the regulatory agencies secured only 33.86 percent of their total budgets. For ANEEL, the initial budget was R\$ 200 million, of which R\$ 100 million were appropriated. But further impounding decrees reduced the budget to R\$ 44 million – less than a quarter of its initial budget. ANATEL was the most affected of all agencies with government impounding: 90.7 percent of its budget of R\$ 4.8 billion was impounded.²⁰ Impounding reflected the fiscal crisis but also reduced the power of the federal agencies in infrastructure by means of a drastic reduction in their autonomy and independence. In other words, considering the magnitude of the fiscal deficits since 2014, some nontrivial impounding of agencies resources could be expected. But such defunding of agencies had started during the bonanza years (from 2003 to 2011).

6.4. Regulatory conflicts at the subnational level

Examples of political interference can also be found at the subnational level. The case of the Rio Grande do Sul (AGERGS) regulatory agency illustrates attempts by the governor to interfere in the agencies' autonomy. The conflict began when the governor, Olívio Dutra, dismissed the directors of the agency without the vote for approval of a qualified majority of the state assembly. The agency board reacted to this decision and appealed to the higher courts. Not counting with a majority in the State Assembly, the governor filed an Action for the Declaration of Unconstitutionality (ADIN) in the Supreme Court alleging that article 7 and 8 of laws 0931 and 11292 that stipulated tenure and staggered terms of office was unconstitutional. In the appeal the Governor argued that the permanence of directors who could act against the state government's policies jeopardized the governability of the state." (*Petição Inicial da ADIN 1449*, p. 8). The lower court sustained the appeal and it was sent to the Supreme Court. Predicting that the Supreme Court would revert the appeal, the governor then backed down and the directors remained in their posts.

A similar episode, with distinct results, occurred in Rio Grande do Norte where the newly elected governor Wilma Maia sacked two directors of the ARSEP, one of whom was the past governor's brother who had been appointed in the last week of the administration of the defeated incumbent governor Fernando Freire. The State Assembly agreed to the changes and no contestation ensued. The first episode illustrates the role of courts, and the second the ability of state executives to interfere in the agency's autonomy in cases in which there is unified control of the legislature and executive. In addition, this latter case suggests that in the absence of accountability and control, autonomy can serve patronage goals. It illustrates how good governance is complex and subtle and not simply a case of more autonomy always being better.

Executive branch interference, political appointments, impounding, and cronyism might have adversely affected regulatory governance. Some countervailing forces mitigated the reputational losses. These include action such as intense media scrutiny, collective action by agencies administrative cadres – which have been recruited meritocratically in many agencies – and a much-improved oversight of agency work by public prosecutors. Some scandals allow a mixed interpretation: They reflect both increased politicization attempts with varying levels of success but also better controls over agencies' work.

7. Concluding remarks

As Brazil strives to recover from the effects of a prolonged global financial crisis coupled with internal political turmoil that together have resulted in a fall of more than 7 percent of gross domestic product per capita in 2015 and 2016, there has been renewed interest in the state of regulatory governance, given the need to attract domestic and foreign investment as a means to reestablish economic activity. There is a general misperception that

regulatory governance has deteriorated in the past decade. We described and analyzed several events involving regulatory agencies' relationship with other political players during this period that indicate that these perceptions could be well founded. Nevertheless, it may be that regulatory governance in Brazil may be sufficiently strong to counteract and possibly attenuate many of the pernicious effects of these attacks on the autonomy and the proper functioning of the regulatory agencies. It is possible that the structure and process of the agencies was able to deal with these events in such a way that would reassure investors that the system contains satisfactory safeguards against undue political interference.

Because these issues can be hard to settle by simply examining these events, it can be useful to try to measure directly the state and evolution of regulatory governance. This was done in 2005 (Correa *et al.* 2006) by creating an index of regulatory governance for Brazilian agencies. Here we repeated the exercise with a new survey 10 years later, which allows us to analyze how the index has changed. If the first round of the index captured the infancy of regulation in Brazil, this second round is the adolescence, where the basic structures and processes are already in place but where there is still much learning-taking place.

Our results are very much in line with Woods's (2017) empirical assessment of the effects of cost-benefits requirements, showing that they have been ineffective mechanisms of political control of regulators by public officials. In the case of Brazilian regulators, however, the administrations tried to interfere not through cost-benefit procedures, but rather through systematic impoundments of agencies' budget, partisan composition of the agencies, and strategic use their vacancies. The main result that emerged from the exercise of comparing the 2005 and the 2016 rounds of the RGI was that on average the quality of regulatory governance had not changed significantly, in spite of political interference. This result is consistent with the idea of resilience and preservation of bureaucratic political power.

Although the sample of agencies is not exactly the same, the questionnaire and the methodology to build the index were identical, and the results were very robust in indicating that the average level of the index had not changed. This is not a statistical artifact, as the index is additive and does not pull toward any common value. Rather it is a reflection of the answers given by the people who work in the agencies to the varied questions that make up the survey. In a sense it is even natural that the measured level of governance should be rather stable, as many of the items that make up the governance are determined in the agencies' founding laws and mandates, which typically do not change over time. Nevertheless, our survey is careful to elicit information on not only the *de jure* aspects of the agencies' governance, but also on the *de facto* aspects, which reflect how things actually work.

Since the first regulatory agencies were created in Brazil they have been through a series of shocks and turbulent economic and political events. It is not easy to decide whether this tumultuous history is a sign of weakness, that should warrant suspicion, or whether it points to a process of learning and maturing that has strengthened the regulatory process' ability to improve and adapt to new situations. Our results suggest that regulatory governance in Brazil is surprisingly resilient and stable. This result is corroborated by the benchmarking of our index against a RGI created by the OECD to measure governance in a very different sample of rich countries. Surprisingly, this other index classifies regulatory governance in Brazil as among the strongest of the sample. This is true whether we use the OECD data with their own index methodology, our data with their index, or their data with our index (although the nature of the data are different for we use a survey and include *de facto* aspects and they examine legislation and focus on *de jure* aspects). What this suggests is that when we see political and institutional conflicts and tension flare up in regulatory issues in Brazil, we should not immediately jump to the conclusion that governance is hopelessly out of control. Rather we should investigate in what ways the governance mechanisms reacted to the crisis and how well they managed the conflicts. While the events might be a sign of regulatory weakness, they can just as well signal a process of learning and maturing that is leading to a stronger and more effective regulatory state.

Acknowledgments

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Endnotes

- 1 The more recent alternation in power in 2019 to a new government with very different political views is still too recent to allow judicious analysis, but will eventually provide an interesting extension.
- 2 The RGI in 2005 did not cover airports, as the agency had not yet been created. Also, ports and rails were part of land transport and water transport agencies, respectively.
- 3 <http://jornalnacional.globo.com/Telejornais/JN/0,MUL546522-10406,00-LULA+QUER+MUDAR+O+PAPEL+DAS+AGE NCIAS+REGULADORAS.html>
- 4 Few months later, the electricity tariffs were also raised by the corresponding regulatory agency, ANNEL, in accordance with the concession contracts signed during the prior administration.
- 5 <https://www1.folha.uol.com.br/fsp/dinheiro/fi0601200413.htm>
- 6 <http://www2.camara.leg.br/legin/fed/decret/2012/decreto-7703-20-marco-2012-612585-publicacaooriginal-135538-pe.html>
- 7 <http://www2.camara.leg.br/legin/fed/decret/2012/decreto-7863-8-dezembro-2012-774744-publicacaooriginal-138315-pe.html>
- 8 We were assisted in approaching the individual agencies by the Brazilian Regulatory Agency Association (ABAR) that vouched for our project and encouraged them to answer the survey. In addition, we contacted the agencies directly several times requesting that the survey should be answered by one of the board members of their choice. Nevertheless only 16 full responses were received from different agencies, which is not an ideal sample size. It also means that the two samples do not contain the same agencies, though there is some overlap, especially of federal agencies. This is partly due to the fact that the World Bank, that financed the project, had a tight deadline for the final report so we could not wait for more respondents to come through.
- 9 The questionnaire is available in the Appendix S1 for this paper. Although the questionnaires are essentially the same, an important difference is that the first survey was applied directly by the authors in face-to-face interviews, while the second was implemented through an online survey platform.
- 10 It is important to recognize that the criteria we use are normative statements and that there is disagreement over many issues and interpretations. Similarly, interaction among different governance features and varied contexts can complicate comparisons.
- 11 The following formula was used: $\bar{I}_{ij} = \bar{I}_j + \frac{(I_{ij} - \bar{I}_j)}{SD_j}$ (1) where \bar{I}_{ij} = rescaled index of agency i in dimension j ; \bar{I}_j = the average value of dimension j ; I_{ij} = the un-rescaled value of agency i in dimension j ; and SD_j = standard deviation of dimension j .
- 12 We thank an anonymous referee for this suggestion.
- 13 The matched questions are available upon request.
- 14 The PMR database contains data from some non-OECD countries, but the governance index was not reported for these in Koske *et al.* (2016).
- 15 It bears keeping in mind when comparing the indices calculated using different data sets that the Koske *et al.* (2016) is a *de jure* only indicator, whereas the RGI includes *de facto* variables. Where data was missing or where a country did not have a regulatory agency in a given sector, the average value across countries for that component was used, following the original methodology. This might distort comparisons across countries somewhat.
- 16 Interestingly, in a World Bank paper that created a regulatory governance index for electricity regulation in Latin America, Chile was ranked 18th out of 19 countries (Andres *et al.* 2008).
- 17 As previously mentioned, a widely cited case is that of the head of ANATEL, Luiz Schymura, who was publicly pressured to resign as agency president by President Lula and the Minister of Telecommunications, Miro Teixeira (Schymura 2018).
- 18 The second bill is an amendment to the constitution (PEC) 156/2015, proposed by Senator José Serra, which may strength significantly the agencies. Among its provisions are strict technical prerequisites required for future directors of regulatory agencies. It lost its appeal following the inclusion of the criteria introduced by the Law 13.303.
- 19 These improvements were not exclusive to the regulatory sector. They were the result of the broad administrative reform initiated in the Cardoso government in 1995 and involved the entire federal bureaucratic structure. Among many other changes, these reforms drastically reduced clientelism, nepotism, patrimonialism, and many other perverse practices endemic in Brazilian bureaucracy. One of the most important changes was to introduce impersonal, competitive, meritocratic criteria for access to public sector jobs. Although regulatory agencies were created after these reforms, many agencies were allowed to temporarily hire without open public examinations in their early years so as to allow for the

transmission of knowledge from the workers in the privatized companies to the agencies. But as this grace period subsided, all agencies eventually came to be staffed solely through competitive and impartial public exams. These reforms were extensive, profound, and embraced by society, and were strengthened by the Fiscal Responsibility Law of 2001. Extensive checks and balances ensured that these rules mandating fair and competitive access to civil service jobs were respected.

- 20 These types of budgetary cuts were not exclusive to the regulatory agencies, rather they took place across the board and were primarily motivated by fiscal prudence in an effort to achieve a primary surplus in government spending. Yet, within this general practice there was scope for the Executive to use the cuts to covertly reward or punish specific agents. The apparently excessive cuts to the budget for ANATEL are related to receipts from fines imposed by this agency on contravening firms, and were, arguably, rightly appropriated by the government. For detailed data, discussion and references on this issue, see FGV-CERI (2016) available at <http://hdl.handle.net/10438/18341>.

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Supporting information

Additional Supporting Information may be found in the online version of this article at the publisher’s web-site:

Appendix S1. Codebook for the Regulatory Governance Index