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What it takes to lower regulatory risk in infrastructure industries

An assessment and benchmarking of Brazilian regulators

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Regulatory governance—how regulators manage concession contracts, or other public-private contractual arrangements and sector laws—can affect the private sector's perception of regulatory risk and thus the availability of private capital for infrastructure projects. Four key elements of the regulatory governance structure can reduce the risk of regulatory failure: political and financial autonomy, decision-making structures that reduce regulatory discretion, access to effective enforcement and other regulatory tools, and efficient rules of accountability. This note presents an analytical framework based on those four elements and applies it in assessing regulatory governance in Brazil.

Since the early 1990s governments seeking to expand private investment in infrastructure have delegated regulatory authority to independent entities. Through this delegation of power, governments sought to assure private investors that they would not intervene arbitrarily and expropriate economic rents once investments were sunk.

Brazil was among them. As investment in infrastructure projects with private participation climbed to US\$125 billion in the late 1990s—more than in China, Indonesia, and the Philippines combined—Brazil created 5 federal and 22 state regulatory agencies for infrastructure industries and reformed most sector laws.

Yet delegating regulatory powers, including enforcement, may not be enough to minimize the risk of expropriation, or regulatory risk. As a result of unforeseen contingencies and insufficient consensus on detailed regulation, concession contracts and sector laws eventually become more flexible, and some degree of regulatory discretion and unpredictability is inevitable.

Good decisions are more likely if regulatory design is sound. But even with sound design, poor decisions can be made. Actual regulatory decisions—how regulators manage concession contracts and sector laws in practice—therefore become a critical part of regulatory risk.

No regulation is risk free. But several conditions appear to reduce the likelihood of regulatory failure: sufficient political and financial autonomy; structures for decision making that constrain regulatory discretion; adequate access to regulatory means, including legal provisions for effective enforcement of decisions; and efficient rules of accountability. Together, these conditions form the structure of regulatory governance.

A framework for assessing regulatory governance

Regulatory governance defines the conditions under which regulators enforce concession contracts and sector laws. While there is no universal framework for assessing regulatory governance, some common attributes are increasingly cited.

Autonomy

Regulators need autonomy from both the government and the regulated industry. Political autonomy insulates regulators from short-term political interference. Two policies favor political autonomy: providing regulators tenure and staggered terms (not coinciding with the term of the executive) and ensuring their financial independence (Smith 1997a). Insulation from private

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sector interests is also important, as decisions by captured regulators tend not to be sustainable.

Decision-making structures

Procedural requirements limit the choices of regulators, protecting private investors from abuses of discretionary power (Smith 1997c). They may also help induce systematic deliberations, strengthening coherence and predictability in the enforcement of laws and contracts (Stern and Holder 1999; Noll 2001). Compliance with due process reduces the risk that a regulator's decisions will be reversed in court (Berg 2001). Transparency (disclosing relevant information, announcing meeting schedules in advance, ensuring that stakeholders have equitable access to decision makers) also increases the legitimacy of regulatory decisions (Smith 1997c).

Decision-making rules are key in assessing the decision-making process (Smith 1997a). Also important is the extent to which precedent binds future decisions (Berg 1998). Requiring written explanations of regulatory decisions can help lay the foundation for consistent implementation of the law (Guasch and Spiller 1999).

Decision tools

Regulators lack information on cost and demand, and regulated firms have little incentive to reveal this information. This asymmetry of information creates opportunities for strategic behavior by both the regulator and the regulated firms (Baron 1989). Informational problems are aggravated by evolving market structures and rapid technological advances.

To reduce the risk of ineffective regulation or mismanagement of contracts, access to information and resources to process it are essential (Noll 2001; Smith 1997b). Good management of the regulatory process requires, at a minimum, the legal means to collect information, budgetary resources for managing and processing information, qualified staff, and standard regulatory tools.

Accountability

Who regulates the regulator? Oversight mechanisms are important tools of accountability. Regulatory agencies should be subject to legislative oversight and to requirements for periodic reporting. Like any public entity, regulators also should be monitored by the public prosecutor's office and by the appropriate audit office. Another important tool of accountability is judicial appeal, usually available when regulatory decisions are administrative.

Efficient rules of accountability provide for evaluation of regulators' performance and periodic review of the strategy for delegation of regulatory powers. These create a mechanism for improving regulation without arbitrary intervention in regulatory decisions. But excessive interference from other organizations may reduce the predictability of regulatory decisions and raise transaction costs (such as when the court reverses regulatory decisions on the basis of content rather than a failure of due process).

The case of Brazil

The framework, based on these four key elements, was applied to analyze regulatory governance in Brazilian infrastructure industries. The analysis identified key parameters to characterize regulatory institutions and quantitative indicators to assess their governance. The assessment was based on a survey of 21 of the 27 infrastructure regulatory agencies (5 federal, 22 state) in Brazil.¹

Autonomy

Most of the agencies reported that directors' positions were tenured. But in a surprisingly large number of agencies (7 of 21) directors can be dismissed for vague reasons (for example, "threatening the agency's integrity"). Directors' terms do not coincide with the executive's except in three state agencies. Seventeen agencies declared that they had the financial autonomy to control their budgets. Only two reported that the government was their sole source of revenue.

Although all the agencies have legal autonomy, 13 reported that the executive (ministry or governor) had made "highly" or "very highly" effective attempts to intervene. Eight agencies (two federal and six state) reported direct interventions, though defending the interests of the government (as shareholder or consumer) was never the primary objective.

Decision-making structures

The main voting rule used by the regulatory agencies to make decisions is simple majority. Only two agencies rely mostly on qualified majority. Two others use both rules, depending on the type of decision. Directors have veto power over the board's decisions in only two agencies. Most agencies allocate cases among their directors on the basis of their areas of specialization or the decision of the director general. In almost all agencies any director can obstruct the normal development of a case after it has been assigned.

No regulation is risk free. But some key conditions can reduce risk.

Almost all agencies must document their decisions in writing and back them with technical analysis. Interestingly, among the 18 agencies formally required to document their decisions, only 7 are also required to cite previous regulatory decisions. Only 6 agencies make decisions without prior communication and discussion among board members. And only 3 (of 18) agencies reported that directors are forbidden by law to hold informal meetings with stakeholders. Seventeen agencies are required by law to allow public participation, with 15 reporting that such participation has led to changes in decisions.

Decision tools

Most regulators reported having appropriate legal means to enforce regulations and collect information. Responses on staffing, however, revealed that only about 20 percent of the agencies' personnel had been admitted through public examinations, reflecting a lack of professional or specialized staff.² Of the 21 agencies surveyed, 12 considered salaries for top technical and managerial positions in regulatory agencies to be at least 25 percent lower than the salary of the attorney general or state finance secretary (used as a benchmark). In 18 agencies technical staff had been in their jobs for more than two years on average, indicating relatively low turnover.

Technical qualifications were limited. Among the 14 agencies providing data on this issue, 9 had employees with master's degrees (representing 4 percent of the technical staff on average), and only 6 had employees with PhDs (2 percent).

Most agencies reported having access to standard regulatory tools. More sophisticated tools for economic regulation (such as models for benchmarking firm performance) were less available.

Accountability

Decisions can be appealed first to the agency—then, if not resolved, to the court. Five agencies reported having had a case reach the Supreme Court. Given the short life of most of the agencies, this number may not be negligible.

Legislatures exert some control over 17 of the 21 agencies surveyed. The most effective mechanism was requesting explanations, followed by summoning the directors and holding public hearings. For all three mechanisms state agencies indicated higher levels of control than federal agencies.

Of the 21 agencies surveyed, 15 hold public hearings. These agencies reported that the hearings

have affected decisions by at least once changing the original proposal (15 agencies), delaying a decision (11), or blocking the original proposal (4).

Ranking the regulators

To rank the Brazilian regulators, results for 83 attributes of regulatory governance were combined in a summary index (RGI-83). One striking result is the degree of homogeneity: two-thirds of the sample are within one standard deviation of the mean. Based on formal attributes, those ranking highest are the three federal agencies—ANATEL (Federal Telecommunications Agency), ANEEL (Federal Electricity Agency), and ANP (Federal Petroleum Agency). But when only questions about actual practices are used (in the RGI-28), the rankings change (figure 1).

Another exercise disaggregated the summary index (RGI-83) by the four components of regulatory governance, by the age of the regulatory agencies, and by their jurisdiction. Results show that older agencies have better decision tools and accountability mechanisms on average. But no statistically significant difference was found between old and young agencies in autonomy and decision-making structures. One possible explanation for these opposite results: while autonomy and decision-making structures are defined when regulatory powers are initially delegated, decision tools and accountability mechanisms may evolve as a result of learning and adaptation.

Conclusion

The assessment of regulatory governance in Brazil led to four broad findings worth highlighting:

- Formal attributes of governance do not always translate into effective attributes in practice, particularly in the case of autonomy.
- Federal regulatory agencies generally score higher than state agencies on formal attributes, especially human resources.
- Older agencies have better decision tools and accountability (but not better decision-making rules) than younger agencies, suggesting a significant learning curve.
- Weakness in the decision-making process undermines the consistency of regulatory decisions over time and the fairness of the regulatory process.

The findings suggest that well-crafted government policy might help regulators fill the holes of the regulatory process. And the (quasi) public good

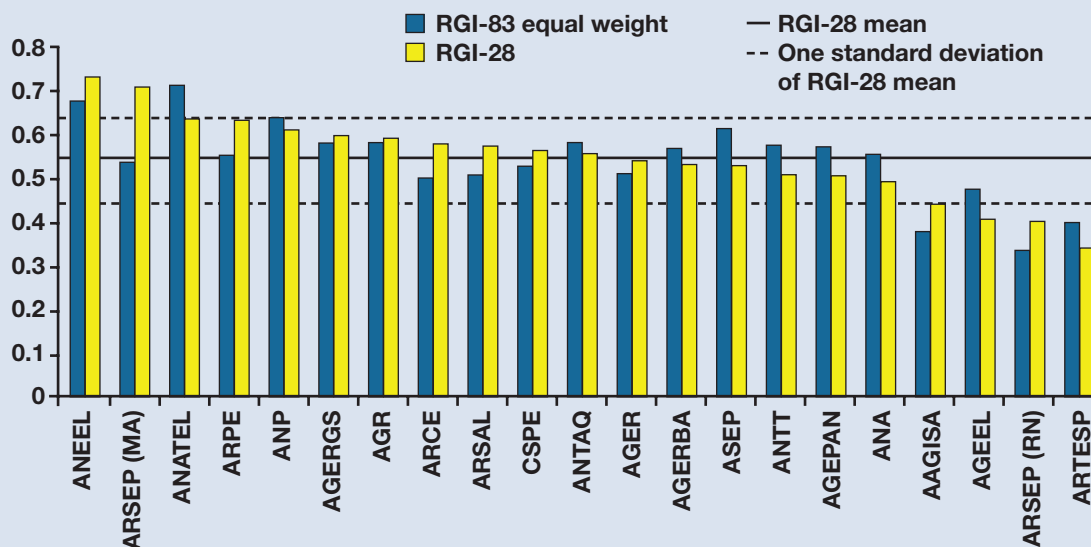
Formal attributes do not always translate into actual practice



FIGURE 1

Rankings on actual practice differ from those on formal attributes

Scores of selected Brazilian infrastructure regulators on regulatory governance indexes (0–1)



Source: Correa and others 2006.

Note: RGI-83 is a summary index measuring 83 attributes of regulatory governance; RGI-28 measures a subset reflecting actual practice. For the full names of the agencies, see Correa and others (2006).

nature of effective regulatory enforcement suggests a rationale for multilateral institutions becoming more systematically involved in this effort.

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Notes

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1. The survey questionnaire included 106 questions divided among four sections: autonomy, decision making, decision tools, and accountability. High-level officials in each regulatory agency, most often its president or directors, responded to the questionnaire. The survey was conducted in April–June 2005.

2. Those not hired through public exams either hold temporary contracts or belong to another government body (in several cases the privatized state enterprise).