A “New Democratic-Developmental State” in Brazil?  
A comparative analysis of governance arrangements, state capacities and policy results

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[Work in Progress / Paper prepared for delivery at RC37.283, the 23rd International Political Science Association World Congress, Montreal, July 19-24, 2014]

1. Introduction

This paper sets out to understand the elements and conditions that make contemporary states more capable of producing successful development projects. We focus on the functioning of the state and our goal is to empirically analyze state capacities, trying to understand the arrangements though which they are constituted and mobilized, as well as tracing their effects on policy performance.

Our ambitious goals are moderated by the analysis of a set of eight cases of development projects in Brazil. The country provides an interesting environment for reflection on these issues for two main reasons. Firstly, there is a reemergence of state activism in the country, in the last decade, in ways that resemble the developmental state of the 1960s and 70s. However, current state activism evolves against a backdrop of democratic institutions, decentralization reforms, and accountability and transparency requirements consolidated since the Constitution of 1988. Therefore, Brazil offers a fertile ground for reflections about the contemporary meanings and empirical expressions of state capacity. What is it like to be a capable state in an environment of power-checking institutions? What are the implications for the state’s deployment of its resources and instruments in the pursuit of policy goals? How do state agents coordinate relationships with political, economic, and social actors? And what are the effects of these different coordination strategies on policy performance? Secondly, there is wide variation across sectors in terms of policy governance arrangements in the Brazilian state. Thus, we can combine a stable political and institutional environment (the macro “rules of the game”) with variation in policy goals, strategies, and sectors.

In order to identify and describe state capacities and evaluate their associations with policy performance in development projects in Brazil, we start from a literature review on the concepts of state capacity and governance (section 2). Our intention is to criticize the traditional concept of state capacity on the basis of an assessment of contemporary transformations of the state. The confrontation of these two pieces of literature reveals insights for an analytical strategy that allows us to evaluate the links between governance arrangements, state capacities, and policy results. We then describe such analytical model, the selected cases, and the parameters for the comparative analysis (section 3). Following from there, we present the findings, analyzing both the associations found between state capacity and policy results and the causal mechanisms.

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2 We define “development projects” as large scale government actions and interventions, in diverse policy sectors (i.e. social, economic, infrastructure, etc.), aimed at transforming the status quo in the short- or medium-term.
linking them (section 4). Finally, we conclude with a synthesis of the main arguments and contributions to the debate (section 5).

2. State capacities in the context of contemporary transformations of the state: perspectives from the literature and conceptual developments

The concept of state capacity has a long history and has been defined differently by many authors, according to their analytical purposes and theoretical traditions (CINGOLANI, 2013). Nevertheless, we can identify at least two levels or generations of analysis (JESSOP, 2001). At a broader level, the concept refers to the creation and maintenance of order on a given territory, which, in turn, requires a set of measures for sovereignty protection, such as lawmaking (legislative capacity), tax collection (extractive capacity), warfare (defense capacity), and the administration of a justice system (coercive capacity). These notions, present in political science debates for decades, guided a first generation of studies on the topic, which was largely dedicated to the analysis of historical processes of state-building. Such analyses advanced our understanding about the formation and construction of government apparatuses where they never existed before or where they were fragile and incipient. Additionally, it improved our ability to analyze the autonomy of the state in relation to specific economic and social actors. Thus, at a macro level, the concept of state capacity has been employed to describe situations in which states emerge and, minimally, guide societies and transform economies, managing internal and external conflicts (TILLY, 1975; SKOCPOL, 1979; LEVI, 1988).

A second generation of studies about state capacity has been more focused on the capacities that states, which already overcame their initial stages of construction, do or do not possess to effectively meet policy goals (MATTHEWS, 2012). Thus, at a more concrete (or meso/micro level), scholars refer to these capacities as those which set the “state in action” – that is, the capacities of identifying problems, formulating solutions, making decisions, executing tasks, and delivering results. Policy production involves bureaucracies, instruments, human, technological, and financial resources, which must be orderly mobilized in order the enable the state to produce action, public goods and services (SKOCPOL, 1985; SKOCPOL & FINEGOLD, 1982; MANN, 1993; EVANS, 1995; GEDDES, 1996).

Despite the differences in scope and focus of analysis across these generations, the literature on state capacity could be largely characterized by a shared concern about the state’s ability to autonomously impose its will (i.e. define paths and make decisions in spite of opposition) and structures (i.e. legal and organizational in nature), controlling the all the essential resources for producing policy and delivering goods and services on behalf of society.

While these conceptions guided much scholarly work through the 20th century, the turn to the current century has been marked by profound transformations in the thinking about the state and in the ways they are organized and operate. Such transformations have been taking place not only inside governments, but also on the “borders” between them, society and the market. Debates around the notion of “governance” – one of the most discussed and mobilized concepts in contemporary social science – have attempted
to capture these changes and the shifts in the ways state authority is exercised\(^3\), and reflect upon the resulting institutional configurations and their implications to the relationships between state, society, and the market in the production of public policies. Such as defined by Rhodes:

“Governance signifies a change in the meaning of government, referring to new processes of governing; or changed conditions of ordered rule; or new methods by which society is governed” (RHODES, 1996: 652).

In general, debates around the notion of governance mobilize three different guiding principles to discuss the configurations of governing arrangements: hierarchy, markets, and networks\(^4\). From there, it is possible to identify a common narrative frequently constructed (or reinforced) in debates about governance. Put simply, it describes the evolution of contemporary states as departing from the hegemony of hierarchical arrangements (imposition and coercion), mainly with respect to state formation, post-war welfare and developmental states, towards the gradual and cumulative introduction, over the 20\(^{th}\) century, of new arrangements inspired in the ideas of market (interested exchanges, contracts, and incentives) and of networks (reciprocity, solidarity, and identity).

Along these lines, many scholars approached the debates about transformations of the state as a shift from “big government” to “big governance” (LEVI-FAUR, 2012), indicating a movement away from arrangements exclusively centered on the hierarchical structures of state bureaucracies towards more decentered arrangements, involving participation of multiple non-state actors and new coordination mechanisms. Such perspective is anchored in the observation of two historical processes. The fragmentation of the large, verticalized state apparatuses, though decentralization, privatization, and deregulation reforms, on the one hand; and in the perception of new social, economic and political actors, and in their recognition as stakeholders and potential partners, on the other hand. In this scenario, the production of public policies demands more complex governance arrangements, which can accommodate the transformed relations between state, society and market actors, in the decision-making and implementation of programs and projects (SCHNEIDER, 2005).

In addition to contributing to a description of contemporary changes in governing processes, the notion of governance raises important questions about the impacts of such transformations on state capacities (MATTHEWS, 2012). Have governments had their capacities to define paths and execute actions reduced? Or have they simply changed the way to do such things? In other words, the perception of transformations in

\[^3\] Schneider (2005) argues that theories of governance can be interpreted as a kind of “institutional cybernetics”. According to him, the term “governance” probably stems from Greek kybernan meaning to pilot, steer or direct, used in reference to the old Greek war ships and, in the case of Greek philosophers, in reference to the steering of “ship of the state”. Equivalent Latin words are ‘gubernare’ and ‘regere’, which were used both for the piloting of ships and of the state (SCHNEIDER, 2005: 34).

\[^4\] Hierarchy designates a type of social coordination and integration characterized by imposition, by means of laws and organizational structures, and obedience. The idea of markets, in turn, suggests that the coordination among actors is based on interested exchanges, organized by means of contracts, incentives, and cost-benefit calculations. At last, the notion of networks suggests that coordination of social action involves interdependency, trust, identity, reciprocity, and the sharing of values, beliefs, or objectives. Even though it is possible to analytically dissociate these three principles, in practice, the operation of the state and its intersections with society and the market will frequently involve their combination or mixture.
government demands interpretations about their implications to the capacities of states to make decisions, implement actions, and solve public problems.

There are three different perspectives in the literature about the consequences of governance reforms to state capacities. In the first, governance transformations are associated with a reduction in the capacities of the state. In the so called “hollowing out of the state” perspective, governance shifts are equated with the state’s loss of monopolistic control over the general well-being of the population and over policy production. The desegregation of bureaucratic conglomerates and the transfer of functions and responsibilities to civil society, subnational governments, and market actors have been understood, by many scholars, as a reduction of state capacity. According to this perspective, policy production has become less centered on government actors, decision-making arenas moved gradually away from the control of the state, and the “soft” instruments of government (incentives, negotiation, persuasion, etc.) became more common than the “hard” ones (imposition, coercion, etc.), opening space for arrangements inspired by the notions of markets and networks (ZEHAVI, 2013; MATTHEWS, 2012). In other words, “the hollowing out of the state means simply that the growth of governance reduced the ability of the core executive to act effectively, making it less reliant on a command operating code and more reliant on diplomacy” (RHODES, 2007: 6).

In reaction, a second perspective emerged, emphasizing the notion of transformation of state functions and roles, rather than an inevitable reduction of its capacities. Scholars, in this line of reasoning, argue that state capacities only shifted from their traditional forms (i.e. direct production) toward new ones (i.e. regulation), without losing their centrality or relevance to the policymaking process (MAJONE, 1999). The basic idea is that the state should only “fill-in” these new spaces for action. By “steering”, instead of “rowing”, governments would still retain the control of essential resources (financial, legal, and symbolic), managing the interactions between economic, social and political actors (MATTHEWS, 2012).

Finally, going beyond the perception of reduction or transformations of “old” state capacities, a third perspective argues that the shifts associated with the notion of governance carry the potential to offer “new” state capacities and amplify possibilities of intervention. Some scholars interpret the increasing interactions between state and non-state actors in policy production as opportunities for complementarity and synergy, for leaner and more capable states (LEVI-FAUR, 2012). Such as stated by Claus Offe:

“[…] one finds the notion that governance can increase the intervention capacity of the state by bringing non-state actors into the making and implementation of public policy, thus making the latter more efficient and less fallible… The catchphrase of this doctrine is that the state should limit itself to ‘steering’ and leave the ‘rowing’ to other actors. One could also speak of auxiliary forces within civil society who, through appropriate means and according to their specific competences and resources, are being recruited for cooperation in the fulfillment of public tasks, become subject to regulatory oversight and economic incentives, and are thus licensed to privately exercise (previously exclusively) public functions. The core intuition is that of a ‘state-organized unburdening of the state’… Underlying this shift in emphasis is the vision of a ‘leaner’ and at the same time more ‘capable’ state” (OFFE, 2009: 555)
In this line, new state capacities are likely to be constructed through more sophisticated arrangements involving new organizational forms in the coordinated distribution of roles and functions among state and non-state actors. These arrangements could combine elements such as coherent guidance with resource pooling, local reach, and adaptation in the frontlines (MATTHEWS, 2012). In addition to perceiving opportunities for effort and resource aggregation, other scholars add that the intensive and multifocal monitoring, resulting from inclusive governance arrangements, creates also opportunities for collective reflection, policy learning and innovation (SORENSEN, 2012; SABEL & ZEITLIN, 2012). Interactions between a diverse set of actors (with their different perspectives, knowledge bases, and technical resources) allows for a richer, denser diagnosis of problems, and for a more creative design of solutions and projects to face them. Therefore, institutionally articulated interactions can be a powerful source of learning and innovation. For Sabel (2004), inclusive governance arrangements that allow “local” actors to judge and review implementation processes, adapting general goals to specific contexts and local conditions, create a dynamics of “learning by monitoring”, through which innovations that increase policy effectiveness do emerge.

The perception of these three different perspectives in the literature poses two analytical challenges that demand new conceptual developments. First, these three perspectives together suggest that the relationship between “governance” and “state capacities” is opened and undetermined. Depending on which actors are involved, how they interact, and what is the distribution of roles and functions among them, governance could be associated with more or less capable states. Therefore, we suggest focusing on “governance arrangements” as a way to identify and analyze specific configurations of actors, resources, and coordinating mechanisms formed around the implementation and management of public policies, projects, or other government actions. Thus, governance arrangements, depending on their characteristics, might promote more or less state capacity in the production of public policies.

Second, while the first and second perspectives deal with a notion of state capacities that emphasizes the legal, organizational structure of the state, the instruments, and resources through which government bureaucracies act and execute implementation actions, the third narrative adds an interactional perspective, emphasizing the inclusion of multiple actors and the negotiations among them over policy issues. The literature on state capacity has overlooked this interactional dimension. The classic studies that tried to explain the success of state-building processes or of the developmental states of the last century, in special, attributed great importance to the bureaucratic dimension, demonstrating as key factors the professional organizations, resources, autonomy and instruments for state planning and coordination. However, such as suggested by the third perspective on the relation between governance and state capacity, the inclusion of multiple actors, processes of collective reflection, and the forging of agreements on

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5 Similar arguments have been made to explain the innovations in the private sector, where production arrangements have also become more complex, involving different actors, units, and firms in modular production and global production chains. Chains of interactions involving firms employees, consumers, suppliers, NGOs, etc., have been researched as sources of innovations (SORENSEN, 2012). Lester & Piore (2004) describe how several examples of product innovation (such as cell phones, medical equipment, and washed blue jeans) emerged from the interactions between professionals from different knowledge areas, who brought together efforts to solve common problems. Therefore, a growing body of research in the private sector has also been calling attention to the interactions between different actors as potential sources of innovation.
policy issues are an important facet for the contemporary study of the state, especially in the cases of countries under democratic rule (Edigeji, 2010). Such “new” capacities could be associated with improvements in the legitimacy of state action, social mobilization, and accommodation of conflicting interests, elements which were not central in the experiences of authoritarian developmental states, but which have to come to attention for democratic states.

Therefore, in order to reconcile the traditional approaches to state capacity with the contemporary trends in transformations of the state, we propose a conceptual calibration. A reflection about state capacity on the basis of its classic/hegemonic definition (bureaucratic autonomy) will not capture the “new” potentials introduced by governance reforms. In order to perceive such renewed possibilities of state capacities, we added a new dimension devoted to capture state capacities associated with inclusion and interactions among multiples actors in policy processes. Thus, we define the capacities of the state to make policy decisions and execute implementation actions under two subcomponents: a) technical-administrative capacities, which involve the capacities derived from the existence and operation of professionalized bureaucracies, with enough human, financial, and technological resources for the coordination of tasks within government and for the monitoring of actions and results; and b) political capacities, referring to the abilities, instruments, and processes for the inclusion of multiple stakeholders (non-state social, economic, and political actors), the promotion of discussions and negotiations among them, and the production of political coalitions and working agreements. While we assume the first type of state capacity to be associated with coherent and efficient performance by government bureaucracies (i.e. “weberian” bureaucracy), the second type should relate to the ideas of legitimacy, accountability, and learning and innovation.

3. An analytical strategy for evaluating governance arrangements, state capacities, and policy results

The aim of the present study is to empirically evaluate state capacities involved in the production of development policies, trying to understand their relations to varying governance arrangements and their effects on policy performance. In this section, we lay out our analytical strategy, describing, first, the type of policy cases we will focus on and, second, the way we will describe and measure their governance arrangements, states capacities, and observed results.

We selected eight cases of large-scale development projects in Brazil. They were selected because they are considered emblematic of the types of policies initiated or reinforced in the last decade (under Presidents Lula and Dilma), period in which there was a substantial increase in state activism, compared to the previous decade (the 1990’s). Therefore, all the selected cases share the same political and institutional environment (external homogeneity), as they were created in the same period, under the same “rules of the game”, by continuity governments (the same governmental coalition) with similar policy priorities and orientations. At the same time, they were selected to maximize the variation across policy areas, objects, and problems (infrastructure, industrial, and social), allowing the observation of state action under different contexts.
of implementation (internal heterogeneity). As a result, the set of eight cases offer a rich base for reflection, such as described in Table 1.  

Each case was then subjected to a three-step analysis:

(a) first, we mapped out and described the governance arrangements that guided implementation processes, by identifying the actors involved (state and non-state, social, economic, political, etc.), organizations, resources (human, financial, technological, etc.), and instruments (legal, administrative, etc.) through which they interact;

(b) second, we evaluated these governance arrangements in terms of the state capacities they were able (or not) to generate, considering both their technical-administrative and political capacities; and

(c) third, we evaluated the performance of each project, taking two dimensions into consideration: output delivery (i.e. percentage of targets reached) and innovation (i.e. introduction of changes and improvements in policy scope, objectives, or management procedures).

Figure 1 illustrates the analytical model that connects governance arrangements (a), state capacities (technical-administrative and political) (b), and policy results (c).

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6 A more detailed description and analysis of each of the cases is part of a book (GOMIDE & PIRES, 2014). The eight cases were researched individually in an initial phase of project, sponsored by the Institute of Applied Economic Research (IPEA). The case studies were based documental sources, secondary data (available data bases), and interviews with key stakeholders. The case studies were produced by a group of IPEA researchers, as well as scholars from Brazilian universities, such as Diogo Coutinho (USP), Maria Rita Loureiro, Marco Antonio Teixeira, and Mario Schapiro (FGV); Paula Pedroti and Ana Karine Pereira (PNPD).

7 We understand implementation processes as the set of decisions and actions taken by multiple actors in the execution of the policy, situated between the policy’s initial launching and the perception of its outputs.
Table 1 – Cases, objectives and policy sector

<table>
<thead>
<tr>
<th>Case</th>
<th>Objective / Context</th>
<th>sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programa Minha Casa Minha Vida (MCMV)</td>
<td>Low-income housing project, launched in 2009, with the twin objective of stimulating the economy and reducing the housing deficit for low-income workers. It is basically a subsidized line of funding, focusing primarily (but not exclusively) on the production of housing units for families with income up to three minimum salaries – integrates PAC’s (Program for the Acceleration of Growth) portfolio (LOUREIRO, MACÂRIO e GUERRA, 2013).</td>
<td>social</td>
</tr>
<tr>
<td>Programa Nacional de Acesso ao Ensino Técnico e Emprego (PRONATEC)</td>
<td>The program was launched in 2011 and it aims at democratizing the access to quality Professional &amp; Technological Education (PTE). It brings together previous projects targeting the expansion of educational infrastructure (expansion of the federal network of PTE institutes), financial and technical assistance to subnational governments and private institutions (fellowships, credit for students and institutions, distance learning, etc.) and coordination of state/province and local-level actors (government and non-government) to expand the access to PTE education. (CASSIOLATO e GARCIA, 2013).</td>
<td>social</td>
</tr>
<tr>
<td>Programa Bolsa Família (PBF)</td>
<td>Conditional cash transfer program, created in 2004, with the goal of supporting the development of vulnerable families (those with per capita monthly income below R$140), lifting them up from extreme poverty, promoting and stimulating their access and use of public services (such as health, educations, and social assistance) (COUTINHO, 2013).</td>
<td>social</td>
</tr>
<tr>
<td>Projeto de Integração do Rio São Francisco (PISF)</td>
<td>Construction of more than 600km of channels in two axis (north and east), in addition to nine pumping stations, with the objective to transpose the waters of the São Francisco River. Re-launched in 2007, the project aims at reducing water scarcity in the Northeast, mitigating the negative impacts of long droughts to thousands of inhabitants in four different states (Pernambuco, Paraíba, Ceará and Rio Grande do Norte) - integrates PAC’s portfolio. (LOUREIRO, TEIXEIRA e FERREIRA, 2013).</td>
<td>infrastructure</td>
</tr>
<tr>
<td>Usina Hidrelétrica de Belo Monte (UHB)</td>
<td>Construction of a hydroelectric power plant in the Xingu River (Amazon), with the objective of expanding the offer of electrical energy in the country to support industrial development. The project was re-launched in 2003 (initially conceived in the early 1980s) and integrated PAC’s portfolio in 2007. (PEREIRA, 2013).</td>
<td>infrastructure</td>
</tr>
<tr>
<td>Programa Nacional de Produção e Uso do Biodiesel (PNPB)</td>
<td>Launched in 2004, the program aims at introducing the production and use of biodiesel in the national territory, by administering its gradual mandatory mixture into mineral diesel. It seeks to structuring a new market and organize the biodiesel production chain, on the one hand, while also including and increasing the participation of small farm agriculture into the chain and market, on the other hand, in parallel to stimulating private investment (PEDROTI, 2013).</td>
<td>Industrial</td>
</tr>
<tr>
<td>Plano Brasil Maior (PBM)</td>
<td>The industrial policy plan, launched in 2011, in its most recent version, with the goal of strengthening innovation and competitiveness of the Brazilian industrial sector. It seeks to transform the country’s productive platform, including a set of instruments in the fiscal, tax, financial, and institutional dimensions, targeting 19 sectors of economic activity (SCHAPIRO, 2013).</td>
<td>Industrial</td>
</tr>
<tr>
<td>Revitalização da Indústria Naval (RIN)</td>
<td>Set of initiatives, launched in the early 2000s and strengthened in 2007 (PAC), targeted at lifting up the Brazilian shipbuilding industry from collapse. They seek to both increase national autonomy in maritime transportation and support the booming oil &amp; gas industry, by fostering the construction of ships in Brazil. It basically involves large volumes of subsidized funding to the industry, associated with local content requisites and the regionalization of investments, with the construction of new shipyards in different states (PIRES, GOMIDÊ e AMARAL, 2013).</td>
<td>Industrial and infrastructure</td>
</tr>
</tbody>
</table>

Fonte: elaboração própria com base em Pires & Gomide (2014)
We will use the revitalization of the shipbuilding industry case (RIN) as an example of how we applied this analytical model to the other seven cases. After identifying the objective and goals defined for the policy (Table 1), we mapped out the governance arrangement that provided support for its implementation. There are four core actors involved: Transpetro\(^8\), the Ministry of Transportation, financial agents (public banks), and private shipyards. The latter designs ship projects and submit them to a council, composed of government, private firms, and workers unions’ representatives, which is responsible for managing the resources of the Merchant Navy Fund, under the supervision of the Minister of Transportation. If projects are approved by the council, private shipyards can contract subsidized loans with the public banks. When construction concludes, Transpetro buys the ships from the shipyards. The banks, the Ministry of Transportation, and Transpetro monitor, independently, construction works in the shipyards. In addition to these core actors, these operations can also suffer interference, at different stages, from the Senate, which authorizes (or not) the levels of debt for the state-owned banks and enterprises, such as Transpetro. Furthermore, oversight agencies, such as Congress’ Accounting Office (TCU) and the Comptroller-General (CGU), as well as the environmental regulatory agency (Ibama) audit financial operations and inspect construction sites, enforcing existing regulations (PIRES, GOMIDE, AMARAL, 2013).

Besides revealing the presence of bureaucratic, political, and civil society actors and their instruments and resources, the mapping out of the governance arrangements creates conditions for the evaluation of the state capacities available for policy implementation. In order to judge technical-administrative capacities, we looked at three aspects: (a) presence of professionalized bureaucracies (ORGA), (b) coordination mechanisms (COOR), and (c) monitoring system (MONI). Following these criteria, we observe relatively high technical-administrative capacities in the arrangement for the revitalization of the shipbuilding industry policy. The Ministry of Transportation dedicates a technical unit for managing the processes. Such unit is composed of career civil servants specialized in infrastructure policies. The presence of large state-owned banks and enterprises guarantees enough financial, human, and technological resources.

In addition, there is a fund dedicated for running the policy. In terms of coordination, the council, which is composed of representatives of various federal bureaucracies, operates as an instrument for action articulation. Also, the Ministry of Planning dedicates special attention to coordinating governmental actors involved, since the policy is part of PAC’s (Program for Acceleration of Growth) portfolio. Finally, multiple actors monitor the execution of ship projects and the correct use of the loans.

When we look into the political capacities fostered by such governance arrangement, we also found a relative high level, as compared to the other case. Political capacities also comprise three measures: (a) interactions between bureaucratic actors and political agents (Congressmen, governors, mayors, etc.) (APOLI), (b) existence of participatory mechanisms (such as councils, public consultations, etc.) (PART), and (c) presence of oversight and regulatory agencies (CONT). The revitalization of the shipbuilding industry policy’s (RIN) arrangement scores high in all three dimensions. It is subject to discussions and authorizations by the Senate. It incorporates civil society actors, such as business associations and workers unions, in decision making processes through the Council of the Merchant Navy Fund. And, finally, it has been continuously subject to

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\(^8\) Transpetro integrates Petrobras Group and is responsible for logistics and transportation.
the scrutiny of the Congress’ Accounting Office (TCU), the Comptroller-General, and, in the cases involving environmental impacts, also Ibama.

After evaluating the state capacities offered by the governance arrangement, the final step of the analysis of each of the case studies involved an appraisal of the results produced. Such as illustrated in Figure 1, results were analyzed in two dimensions: output delivery and innovation. In the case of the RIN, for example, output delivery was considered high, given that the policy met satisfactorily the goals of stimulating demand and increasing employment in the sector, in addition to the high volume of financial transactions. In respect to innovation, we found that important improvements are in course, especially in the procedures for shipbuilding projects assessment and in the monitoring of construction sites and financial flows. However, some limitations still persist in the enforcement of local content requisites and in the competitiveness of the domestic industry. Therefore, the case scores medium in the innovation scale (PIRES, GOMIDE, AMARAL, 2013).

We applied the same criteria and model of analysis for the eight selected cases and their respective classifications in terms of state capacities (technical-administrative and political) and results (output delivery and innovation) are displayed below. Table 2 indicates de presence or absence of the three criteria within two groups, described in the example above, to measure, respectively, technical-administrative capacity and political capacity. When the three conditions are present, the case is classified as having high capacity. When only two conditions are present, the case scores medium. And when, only one or none condition are satisfied, we classify as low capacity. Table 3 displays the results of these calculations for the two dimensions of state capacity, in addition to presenting the classification of the cases in terms of their results (output delivery and innovation). In the appendix, we included a graphical representation of the scores presented in Table 3, making the similarities and differences across the cases easier to visualize.

Table 2 – Criteria for Measuring Technical-Administrative and Political Capacities (dichotomized values)

<table>
<thead>
<tr>
<th>Cases</th>
<th>Technical-Adm. Capacity</th>
<th>Political Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ORGA</td>
<td>COOR</td>
</tr>
<tr>
<td>MCMV</td>
<td>Yes (1)</td>
<td>Yes (1)</td>
</tr>
<tr>
<td>PRONATEC</td>
<td>Yes (1)</td>
<td>Yes (1)</td>
</tr>
<tr>
<td>PBF</td>
<td>Yes (1)</td>
<td>Yes (1)</td>
</tr>
<tr>
<td>PISF</td>
<td>No (0)</td>
<td>Yes (1)</td>
</tr>
<tr>
<td>UHBH</td>
<td>Yes (1)</td>
<td>No (0)</td>
</tr>
<tr>
<td>PNPB</td>
<td>Yes (1)</td>
<td>Yes (1)</td>
</tr>
<tr>
<td>PBM</td>
<td>Yes (1)</td>
<td>No (0)</td>
</tr>
<tr>
<td>RIN</td>
<td>Yes (1)</td>
<td>Yes (1)</td>
</tr>
</tbody>
</table>

9 Reporting the analysis of each case would extend the paper beyond its page limitations. Detailed information about all the cases is available in GOMIDE & PIRES (2014).
<table>
<thead>
<tr>
<th>Cases</th>
<th>Technical-Adm Capacity</th>
<th>Political Capacity</th>
<th>Output Delivery</th>
<th>Innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCMV</td>
<td>High (2)</td>
<td>Low (0)</td>
<td>High (1)</td>
<td>Low (0)</td>
</tr>
<tr>
<td>PRONATEC</td>
<td>High (2)</td>
<td>High (2)</td>
<td>High (1)</td>
<td>High (1)</td>
</tr>
<tr>
<td>PBF</td>
<td>High (2)</td>
<td>Medium (1)</td>
<td>High (1)</td>
<td>High (1)</td>
</tr>
<tr>
<td>PISF</td>
<td>Medium (1)</td>
<td>High (2)</td>
<td>Low (0)</td>
<td>High (1)</td>
</tr>
<tr>
<td>UHBM</td>
<td>Medium (1)</td>
<td>Low (0)</td>
<td>Low (0)</td>
<td>Low (0)</td>
</tr>
<tr>
<td>PNPB</td>
<td>High (2)</td>
<td>Medium (1)</td>
<td>High (1)</td>
<td>High (1)</td>
</tr>
<tr>
<td>PBM</td>
<td>Low (0)</td>
<td>Low (0)</td>
<td>Low (0)</td>
<td>Low (0)</td>
</tr>
<tr>
<td>RIN</td>
<td>High (2)</td>
<td>High (2)</td>
<td>High (1)</td>
<td>High (1)</td>
</tr>
</tbody>
</table>

Tables 2 and 3 indicate that each case can be characterized by a configuration of state capacities and results (see Appendix). Given our goal to identifying potential associations between these two types of elements, we employed the crisp-set and multi-value Qualitative Comparative Analysis techniques (csQCA and mvQCA). These techniques are based on set theory and Boolean algorithms, allowing us to simplify complex data structures (i.e. “minimization”), by comparing cases and identifying patterns of association between conditions and outcomes (MARX, RIHOUX, RAGIN, 2013; RIHOUX, MEUR, 2009). Tables 2 and 3 provide the basis for these calculations, computed by the Tosmana software. In the next section, we present the results of these analyses, as well as their interpretations.

4. Comparing development projects in Brazil: links between state capacities and policy results

The comparative analysis of the eight cases of development projects in Brazil, following the model described in the previous section, generated interesting findings for thinking about the relationship between governance arrangements, state capacities, and policy results. In this section, we report these findings in two steps. First, we describe the associations found between technical-administrative and political capacities, and output delivery and innovation. Second, explore theses associations further, trying to identify the mechanisms that link and explain how different types of capacities produce different types of policy results.

4.1 – Associations between policy results and state capacities

If we consider the two dimensions of policy results (output delivery and process innovation) as outcome variables and the two dimensions of state capacity (technical-administrative and political) as explanatory conditions, we transform Table 3 into two truth tables (Tables 4 and 5), each resulting in three configurations of cases with

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outcome variable equals one (i.e. high) and three other configurations with output delivery equals zero (i.e. low).

Table 4 – Truth table for outcome variable output delivery (capacities)

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Tech-Adm Cap.</th>
<th>Pol. Cap.</th>
<th>Outcome Variable</th>
<th>Case Configurations</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>0</td>
<td>1</td>
<td>MCMV</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
<td>UHBM</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>1</td>
<td>PRONATEC, RIN</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>0</td>
<td>PNPB, PBF</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>0</td>
<td>PISF</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>PBM</td>
<td></td>
</tr>
</tbody>
</table>

The variations across the configurations of cases that present high output delivery occur only in one type of condition (political capacities). Therefore, the minimization of the outcome variable “output delivery”, when it is equal to 1, suggests that high output delivery is observed in the cases with high technical capacity, such as described in the minimal formula.

Formula 1 (minimizing value 1, without logical remainders):

\[
\text{TEC.ADM-CAP}\{2\} \rightarrow \text{OUTPUT_DEL}\{1\}^{11}
\]

\[(\text{MCMV} + \text{PRONATEC}, \text{RIN} + \text{PNPB}, \text{PBF})\]

Inversely, the minimization of the outcome variable “output delivery”, when it is equal to 0, suggest that technical-administrative capacities are medium or low\(^{12}\).

Table 5 – Truth table for outcome variable innovation (capacities)

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Tech-Adm Cap.</th>
<th>Pol. Cap.</th>
<th>Outcome Variable</th>
<th>Case Configurations</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>0</td>
<td>0</td>
<td>MCMV</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
<td>UHBM</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>1</td>
<td>PRONATEC, RIN</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>1</td>
<td>PNPB, PBF</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>1</td>
<td>PISF</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>PBM</td>
<td></td>
</tr>
</tbody>
</table>

\(^{11}\) In this and the following formulae, we use basic Boolean Algebra conventions. The numbers inside \{\} indicate the values assumed by the variables (e.g. OUTPUT_DEL \{1\}, means high output delivery, and \{0\}, means low). “\&” represents the logical “and”, suggesting that both elements must be simultaneously present. “\lor” represents the logical “or”, suggesting that one or the other element must be present (alternatively). Finally, the symbol “\rightarrow” expresses the link between a set of conditions and the outcome.

\(^{12}\) The minimization of variable output delivery, when it equals zero, including logical remainders, required two simplifying assumptions: TEC.ADM-CAP\{0\}POL-CAP\{1\} + TEC.ADM-CAP\{0\}POL-CAP\{2\}. 
Focusing now on the outcome variable “innovation”, the minimization based on Table 5 indicates that high innovation (when it equals 1) is observed under three combinations of conditions (Formula 2).

Formula 2 (minimizing value 1, without logical remainders):

\[
\text{TEC.ADM-CAP}^2 + \text{TEC.ADM-CAP}^2 + \text{TEC.ADM-CAP}^1 \times \text{POL-CAP}^2 \times \text{POL-CAP}^1 \times \text{POL-CAP}^2
\]

(PRONATEC,RIN) (PBF,PNPB) (PISF)

The formula suggests that high innovation will occur when: (a) high technical-administrative capacity is simultaneously present with high political capacity; OR (b) high technical-administrative capacity is simultaneously present with medium political capacity; OR (c) medium technical-administrative capacity is simultaneously present with high political capacity. However, Formula 2 does not go much beyond what we can observe by eye-examining Table 5. To achieve more parsimony, we allow the software to include non-observed cases, called “logical remainders”, and produce a simpler Boolean expression, based on some simplifying assumptions. As expressed by Formula 3, this procedure produces a simpler term that accounts for all the cases above, according to which high innovation is associated with medium (1) and high (2) political capacities.

Formula 3 (minimizing value 1, with logical remainders):

\[
\text{POL-CAP}^1,2 \rightarrow \text{INNOV}^1
\]

(PRONATEC,RIN+PNPB,PBF+PISF)

Conversely, when innovation is low (equals 0), the minimization indicates that political capacities are low (equals 0).

In sum, the analyses produced two main findings. First, high technical capacity is related with high output delivery. Second, medium and high political capacities are associated with high innovation. These findings are interesting because, even though we considered both technical-administrative and political capacities as conditions potentially influencing our outcome variables (output delivery and innovation), the results indicated that different types of state capacities are associated with different types of policy results. In some sense, different arguments in the literature had already previewed these relationships. While the traditional literature on state capacity had already argued about the importance of professionalized bureaucracies for effective policy implementation, on the one hand, strands of the more recent literature on governance had already indicated a potential connection between the inclusion of

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13 Simplifying assumptions refer to the possibilities of assuming that non-observed cases existed and covered larger areas in the logical space (Venn Diagram), allowing a simpler Boolean expression to describe the conditions that characterize a set of cases.

14 Including two simplifying assumptions: CAP POL{1}CAP TEC{0} + CAP POL{1}CAP TEC{1}.
multiple stakeholders and learning and innovation, on the other hand. Still, the present findings provide reinforcement for these claims, based on the comparative analysis of development projects in Brazil.

4.2 – Explanatory mechanisms

The identification of associations between state capacities and policy results is interesting, but adds little to our knowledge about the mechanisms through which technical-administrative capacities should lead to output delivery, and through which political capacities should promote innovation. Therefore, we explored the associations between the subcomponents (criteria) of each type of state capacity and output delivery and innovation. In addition to going deeper in the calculations, by disaggregating these associations, we delved within the case studies in search for elements that could help us understand and explain such associations.

By considering again the two dimensions of policy results (output delivery and innovation) as outcome variables and now disaggregating the two dimensions of state capacity (technical-administrative and political) into their subcomponents as explanatory conditions, we transform Table 2 into two truth tables (Tables 6 and 7).

**Table 6 – Truth table for outcome variable output delivery (subcomponents of technical-administrative capacity)**

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Outcome variable</th>
<th>Case Configurations</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORGA</td>
<td>COOR</td>
<td>MONI</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

The Truth Table (Table 6) indicates four configurations of cases, being one for outcome variable equals one (i.e. high) and three configurations for outcome variable equal zero (i.e. low). The minimization of the outcome variable “output delivery”, when it is equal to 1, resulted in one solution that explains five cases, such as below.

Formula 4 (minimizing value 1, without logical remainders):

\[
\text{ORGA}\{1\} \times \text{COOR}\{1\} \times \text{MONI}\{1\} \Rightarrow \text{OUTPUT\_DEL} \{1\}
\]

\[
\text{(MCMV,PRONATEC,PBF,PNPB,RIN)}
\]

As we can see, all the five cases that exhibit high output delivery (1) are characterized by the simultaneous presence (1) of the three conditions associated with technical-administrative capacity: a) professionalized and resourceful organizations (ORGA); b) coordination mechanisms (COOR); and c) monitoring systems (MONI) – see Venn Diagram 1, in the Appendix. That means high output delivery occurs only when all the subcomponents of the technical-administrative capacity are present. Combinations of
conditions involving one or more absences (0) are associated with low output delivery (0), such as observed in the PISF, UHBM, and PBM cases.

Searching for a more parsimonious solution, by introducing one simplifying assumptions\(^{15}\), it is possible to affirm that the simultaneous presence of professionalized and resourceful organizations (ORGA) and of the coordination mechanisms (COOR) are the minimum common conditions associated with high output delivery, and that best differentiate these cases from the cases with low output delivery, as demonstrated below.

Formula 5 (minimizing value 1, with logical remainders):

\[
\text{ORGA}\{1\} \ast \text{COOR}\{1\} \Rightarrow \text{OUTPUT}_\text{DEL}\{1\}
\]

\(\text{(MCMV, PRONATEC, PBF, PNPB, RIN)}\)

We tested for low output delivery (equals 0) and also found association with low levels/inexistence of professionalized and resourceful organizations (ORGA) or of the coordination mechanisms (COOR).

When we examine the cases from within, these relationships became substantively clearer. Practically in all the eight cases the examination of their governance arrangements indicated the presence and involvement of a diversity of state and non-state actors. On the government side, these governance arrangements mobilized ministries, their subsidiary agencies, and state-owned banks and enterprises. On the non-government side, governance arrangements frequently engaged private firms, business associations, and NGOs. Together, these organizations provided enough resources (human, financial, and technological), technical and legal competences, in addition to the performance of different roles and functions, contributing to the execution of tasks leading to the realization (partial or full) of the goals established by each policy.

In combination with the presence of professionalized and resourceful organizations, we observed coordination mechanisms actively operating in the cases resulting in high output delivery. Such coordination mechanisms are a vital piece in governance arrangements that turn them capable of productively combining actors, resources, and roles, on the one hand, while also preventing overlaps, redundancy, and internal conflicts. Thus, a diverse set of resourceful and competent organizations can only contribute effectively to reaching high levels of output delivery in combination with coordination mechanisms. As we examined each case from within, the combination of professionalized and resourceful organizations (ORGA) with coordination mechanisms (COOR) was present only in the cases presenting high output delivery, such as in the examples below.

The coordination of government bureaucracies stood out in cases such as MCMV and PNPB. Their governance arrangements involved different federal government organizations, reaching up to 13 agencies in the latter. In both of them, The Chief of Staff Office (Casa Civil), linked directly to the President, operated as a “superministry”\(^{16}\), dictating guidelines, connecting the different agencies, mitigating conflicts and, most

\(^{15}\) ORGA\{1\} \ast \text{COOR}\{1\} \ast \text{MONI}\{0\}

\(^{16}\) Such as described by Edigheji (2010), the existence and operation of superior, hierarchical units (“superministries”) were one the key characteristics of the East Asian developmental states.
importantly, demanding and monitoring performance. Casa Civil turned the implementation of these projects into a coherent and continued flow of ordered actions. Similarly, in the case of the revitalization of the shipbuilding industry (RIN), Casa Civil and Ministry of Planning coordinated an Executive Group (GEPAC), which intended to monitor and overcome emerging implementation issues, easing the tensions across the federal agencies involved. Finally, in other cases, such as PRONATEC and PBF, the sectorial ministries directly responsible for their implementation, respectively, the Ministry of Education and the Ministry of Social Development, acquired their own coordination capacities, as these projects became recognizable priorities in the President’s agenda. With the explicit empowerment of the President, these line ministries gained leverage to orient the actions of other agencies involved with their projects. In all of these cases, we still observed the presence of work groups and inter-ministry committees contributing to the orchestration of actions within the federal government.

The coordination of agencies across levels of government was also salient in cases such as MCMV, PBF, and PRONATEC. The governance arrangements of these projects brought up challenges regarding coordination between federal and subnational bureaucracies. In the first two cases, Caixa Econômica Federal (CEF), a state-owned bank, played a key role, integrating the formulation of plans at the federal level with their execution at the local level. By controlling access to housing funding and the conditional cash transfer deposits, CEF could introduce the requirements and guidelines formulated at the top. In the PBF and PRONATEC cases, we could observe how committees and forums involving representatives from the federal, state, and local level governments performed important roles in creating spaces for discussion and consensus building among the actors involved with implementation.

At last, another dimension of coordination that proved relevant for the success of the cases with high output delivery refers to the mechanisms for the organization of public-private relationships. In the RIN, Transpetro, a state-owned subsidiary of Petrobras, operated as an instrument for stimulating private sector interest in the project and for organization their demands for subsidized funding, as the company established contracts guaranteeing the purchase of ships built by Brazilian shipyards. Another example of the sort as observed in the PNPB, where a certification scheme (Selo Combustível Social) organized the biodiesel productive chain, articulating small for producers, large scale agriculture, and the industry, all the way to the final distribution of the fuel.

In contrast to these five cases, where coordination mechanisms were vital to transforming the presence of diverse organizations into capacity for action and results, other cases, such as PBM and UHBM, demonstrate that the absence of these mechanisms clearly damaged output delivery. The governance arrangement of the UHBM case involved line ministries, such as the Ministry of Energy and the Ministry of Environment, in addition to other regulatory agencies, which were frequently engaged in conflicts and stalemates, provoking tensions and delays in implementation. Such situation only began to evolve years later, when Casa Civil and Ministry of Planning took over the coordination of the project. In parallel, the industrial policy (PBM) suffered with similar problems. Even though PBM’s governance arrangement formally created spaces for the articulation of the ministries and agencies involved in implementation, these venues never really operated in practice. Furthermore, the absence of a leading actor, occupying a decision making center and with capacity to
guide the remaining participants, has compromised the execution of the actions previewed by the plan.

Therefore, a more fine-grained analysis of the cases confirms and details the associations found between technical-administrative capacities and output delivery. The combination of professionalized and resourceful organizations with coordination mechanisms elevates the technical-administrative capacities in governance arrangements and leads to high output delivery. The absence of such conditions characterizes the situations associated with low output delivery.

Table 7 – Truth table for outcome variable innovation (subcomponents of political capacity)

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Outcome variable</th>
<th>Case Configurations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>INNOV</td>
<td></td>
</tr>
<tr>
<td>APOLI</td>
<td>PART</td>
<td>CONT</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Turning now to the analysis of the conditions associated with the outcome variable “innovation”, the Truth Table (Table 7) displays five configurations of cases, being three for outcome variable equals one (i.e. high) and two configurations for outcome variable equal zero (i.e. low). The minimization of the outcome variable “innovation”, when it is equal to 1, resulted in the combinations of two terms that explain a total of five cases, such as below.

Formula 6 (minimizing value 1, without logical remainders):

$$\text{APOLI}\{1\} \times \text{CONT}\{1\} + \text{APOLI}\{1\} \times \text{PART}\{1\}$$

$$(\text{PRONATEC, PISF, RIN+PBF}) (\text{PRONATEC, PISF, RIN+PNPB})$$

Three cases (PRONATEC, PISF, and RIN) that resulted in innovation are characterized by the simultaneous presence of the three conditions (APOLI, PART, and CONT). The other two cases that involved innovations (PBF and PNPB) are characterized by the presence of only two of these conditions (see Venn Diagram 2, in the Appendix). Therefore, together, these five cases can be explained either by the simultaneous presence of political agents (APOLI) and oversight bodies (CONT) OR by the simultaneous presence of political agents (APOLI) and participatory mechanisms (PART). When two of these conditions are simultaneously absent (APOLI and PART = 0), the associated outcome is low innovation (0), such as in the MCMV, UHBM, and the PBM cases.

Given the results pointed to two solutions that best describe that cases in terms of the conditions associated to innovation, the parsimonious solution identified the common element across these terms, such as demonstrated below (see also Venn Diagram 2, in the Appendix – all cases scoring 1 in innovation are in the right-hand side). We also
tested for low innovation (equals 0) and also found association with no presence of political agents (APOLI) in the governance arrangement.

Formula 7 (minimizing value 1, with logical remainders\(^{17}\)):

\[
\text{APOLI}^1 \rightarrow \text{INNOV}^1 \\
\text{(PRONATEC,PISF,RIN+PBF+PNPB)}
\]

When we look inside the cases, the substantive links between these conditions associated with political capacity and innovation outcomes can be revealed more explicitly. Especially in the cases marked by intense conflicts between diverse stakeholders, the interactions with political agents (APOLI) and the presence of participatory mechanisms (PART) – such as councils, hearings, tasks forces, etc. – create opportunities for voicing, debates, and negotiations that led to the transformation of tensions into revisions and improvements in the projects’ scope, objectives, and strategies.

For example, the project aiming at the transposition of the São Francisco River waters (PISF) was marked by deep rooted tensions between coalitions of political and social actors from that states that would lose hydric resources versus those states that would benefit from the transposition. In Congress, debates were intense and polarized between the Senators and House Representatives of these different states, in addition to the active participation of some of the governors. In parallel to fights in Congress, participatory mechanisms played a key role in creating spaces for deepening the debate and for the production of working agreements between those who favored and countered the project. The São Francisco River Basin Committee, a regional level body composed of government and civil society representatives, mobilized local political and social actors for debates and contributed to the formulation of alternative strategies, which were then examined by the National Council of Hydric Resources. As a result, government remodeled the scope and objectives of the project, which since then not only aims at building the transposition channels, but also includes significant investments in the revitalization of the river margin areas. Now the project enjoys greater support and legitimacy, while also benefiting the states that first considered themselves as “losers”.

Similarly, in the program aimed at creating a biodiesel industry and market in the country (PNPB), there were important tensions between the industry’s need for cheap raw material (such as castor-oil plant and other vegetable oils) and the gradual inclusion of small farm agriculture in the production chain (versus large scale forma production). The existence of multiple channels for participation and discussion was the key for balancing PNPB’s goals as an energy socially sustainable program. Since the formulation of the program, Congress has been an important arena for the expression of industry’s interests in the expansion of the program without the small farmers’ component. In parallel, spaces for participation created in the Executive Branch, such as public hearings, consultations and work groups, serve as channels for the expressions of small farm agriculture organizations’ demands, while also including representatives

\(^{17}\) The parsimonious solutions demanded only one simplifying assumption: APOLI\(^1\)\text{PART}\(^0\)\text{CONT}\(^0\)
from the industry and from the large scale agriculture. Through these channels, the program’s regulations are continuously revised. Therefore, by guaranteeing “seats” and voice to the different interested actors, the implementation of the program has been able to contemplate different perspectives on the policy. In past experiences, where these channels were absent, such the Ethanol Program, implementation focused only on the industrial side, at the expense of social and environmental sustainability aspects.

In contrast with these two cases, in the project aiming at the construction of the Belo Monte Dam (UHBM), interested and affected actors did not have the same opportunities for participation, debate, and negotiation. First, the project passed through Congress too quickly, under urgency regime, preventing its discussion by specialized committees or in plenary sessions. Second, participatory processes, such as public hearing and consultations with affected populations, which were required by domestic laws and by ILO Convention 169, were not conducted properly and did not create opportunities for social and political actors to express their criticisms and proposals. As such they never ended up affecting the electrical sector bureaucracies responsible for implementing the project. As a result, no revision on the project took place in this stage and opposition actors began channeling their dissatisfaction through the Courts. In addition to preventing the emergence of innovations, the absence of political capacity in this arrangement has been also creating obstacles to the project’s execution (i.e. judicial processes).

In other cases, interaction with political agents and participatory channels has sparked attention to “new” publics or beneficiaries. For example, in the PRONATEC case, congressional debates resulted in laws that improved the original design of program. After analysis and discussions, congressmen agreed to include a financial and technical support component for states and local governments. They also introduced affirmative action quotas for low income and disabled students, as well as for those belonging to traditional populations (indigenous) groups or residents in the North and Northeast regions. Furthermore, professional and technological education institutes have to conduct local public hearings in order to define the list of courses offered, as well as their curricula. By doing so, they have been reaching a better alignment between their educational offers and the localities’ social, cultural, and productive demands.

Differently, in the housing policy (MCMV), we observed much less intense congressional involvement and a gap in terms of participatory mechanisms for engaging civil society. Despite the active engagement of construction firms, housing movements and urban planning professionals never had much opportunity to influence the implementation of the program. As a consequence, short term economic performance has been prioritized over urban inclusion and city sustainability concerns. As such, the current program repeats some of the mistakes of previous housing policies (i.e. BNH) that created disorganized urban growth, high speculation, and housing areas with undersupplied infrastructure.

Finally, other cases are illustrative of how the continuous scrutiny by oversight agencies spurs revisions and improvements in management processes. For example, the RIN case, in addition to being subject to authorizations by Congress and to including a council with participation of firms and workers, its governance arrangement still included the auditing by the General Accounting Office (TCU) and the Comptroller-General (CGU). These audits have offered important information for diagnosis failures and limitations in the management processes within the Ministry of Transportation. As
we could observe, most of the recommendations coming from audit reports have been incorporated (either fully or partially) and, as a result, the operational capacities of the technical units within the Ministry increased. A very similar process has also been observed in the PISF case, in which the responses to these audit reports end up contributing to the dealing with the challenges of management large construction works.

In sum, as we look deeply into the cases the links between political capacities and innovation become clearer. As we could see, greater interaction with political agents, incorporation of participatory channels, and exposure to oversight create transparency, opportunities for inclusion, debates, and negotiations, which, in turn, generate elements for revision and innovation during policy implementation. When such conditions were absent, such as observed in the comparisons across the cases, policy learning and improvement were not traceable.

5. Concluding remarks

In this paper, we inquired about the elements and conditions that make states capable of producing successful development projects. We started with a brief revision of the concept of state capacity and a reflection about its meanings in the context of contemporary transformations of the state, especially in Brazil. We concluded such review with two analytical proposals. The first suggested the advantages of focusing on the governance arrangements that guide the production and implementation of specific policies. The second suggested revisions on the traditional definitions of state capacity, so as to incorporate a political capacity sub-dimension and to distinguish it from a technical-administrative sub-dimension.

With the goal of applying these notions to an empirical analysis of large-scale development projects, we selected eight such cases in Brazil. For each of them, we mapped out and described their governance arrangements, evaluated their technical-administrative and political capacities, and assessed their results in terms of output delivery and innovation. Finally, we subject the analysis of these case studies to comparison, in order to search for emerging patterns and associations between governance arrangements, state capacities, and policy results.

Our findings indicate that there are important associations between state capacities and policy results, among the eight cases analyzed. Actually, they show that different types of state capacities are associated with different types of policy results. High technical capacity was associated with high output delivery. And high political capacity was associated with high innovation. In some sense, different arguments in the literature had already previewed these relationships. While the traditional literature on state capacity had already argued about the importance of professionalized bureaucracies for effective policy execution; strands of the more recent literature on governance had already indicated a potential connection between the inclusion of multiple stakeholders and learning and innovation.

Furthermore, the comparative analysis of development projects in Brazil allowed us to go deeper in the analysis of the mechanisms and links explaining the associations between state capacities and policy results. A more fine-grained analysis of the cases indicated that:
a) the combination of professionalized and resourceful organizations with coordination mechanisms elevates the technical-administrative capacities in governance arrangements and leads to high output delivery; and

b) greater interaction with political agents, incorporation of participatory channels, and exposure to oversight create transparency, opportunities for inclusion, debates and negotiations, which, in turn, generate elements for revision and innovation during policy implementation.

In sum, by looking into a set of contemporary development projects in Brazil we generate evidence supporting the claim that analyses of state capacity must consider a political dimension, in addition to traditional evaluations of bureaucratic autonomy (i.e. technical-administrative dimension). Moreover, the findings suggest that specific conditions associated with these two subtypes of state capacity matter for the successful implementation of such policies. These conclusions support ongoing reflections about the meanings and measurements of state capacity today and advance our empirical knowledge about the manifestations of the phenomenon in contemporary Brazil.
References


Appendix

State Capacities

- Technical-administrative capacity
  - High
  - Low

- Political Capacity
  - High
  - Low

Policy Results

- Output delivery
  - High
  - Low

- Innovation
  - High
  - Low

Programs:
- MCMV
- PNPB
- Pronatec
- UHBM
- PBF
- PBM
- PISF

Legend:
- MCMV
- PNPB
- Pronatec
- UHBM
- PBF
- PBM
- PISF