



Panel: How to Create Quantitatively Comparable Policy Measures

Measuring and comparing state capacities to achieve the Sustainable Development Goals (SDGs) in an emerging economy: challenges and research proposal

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Abstract

The field of research on state capabilities has been a recurring theme since the late 1980's. Since then, most of the studies have focused on the definition of the concept of state capabilities, the different strategies to measure it and their relationship to variables such as economic growth and successful implementation of public policies. The present paper discusses a research design that will be applied to develop an extensive agenda on state capacities in the Brazilian public administration. From the research on the federal government, it is expected to compare results at the international level and adapt this methodology to subnational public administrations.

Keywords: state capacity, policy capacity, Brazilian public administration, Sustainable Development Goals (SDGs).

1. Introduction

The field of research on state capabilities has been a recurring theme since the late 1980's when Peter Evans and collaborators published their seminal book "Bringing the State back in" (1985). Since then most of the studies have focused on the definition of the concept of state capabilities, the different measurement strategies and its

relationship with variables of results, such as economic growth, successful implementation of public policies and anti-corruption measures. The research design for the measurement of state capabilities must let space for comparing these capabilities among countries. Besides that, the progress of the Millennium Development Goals (MDGs) agenda of the United Nations is currently dedicated to promoting the Sustainable Development Goals (SDGs). A new set of commitments aims to implement public policies for greater social justice and the extension of human rights. The challenge is to articulate citizens, markets and governments to work together promoting human development.

The present paper discusses the application on empirical research of a concept of state capacity as administrative and relational dimensions, as described in section 2. This research is an open agenda led by National School of Public Administration that will begin focusing the Brazilian federal bureaucracy, which operates in all 27 subnational states, divided into more than 200 agencies and comprising more than 600 thousand civil servants. This structure comprises careers dedicated to the formulation and implementation of public policies, as well as those dedicated to administrative services and the provision of citizen services.

Section 3 discusses the strategic aspects of the proposed research, analyzing the specific traits of public administration and how to deal with them when elaborating a survey instrument to collect data and information. Two recent important surveys designs are described and analyzed, in order to give some elements to help the ongoing research effort. Section 4 presents the design and strategy of the survey currently in course, focusing aspects of sample selection and comparability with other studies. Some conclusions and reflections about possible future research agenda are developed in the concluding section.

2. The state capacities approach

Concern about the institutional aspects of the formation of national states and their effectiveness in achieving the goals of economic and social development has been present in the literature of the social sciences since the 1980s. This approach emerged in studies analyzing the experiences of development and the critical evaluation of State's contemporary minimalist stabilization and redesign programs (Fernandes et al, 2017).

The review of state performance has highlighted the role of bureaucracy and Weberian models of state organization (Evans et al., 1985; Evans and Rauch, 1999).

The protagonism of the state came to be perceived as a crucial factor for the success of economic development, and the autonomy and strength of the state were attributes expressly mentioned (Fernandes, 2007). In contrast to a minimalist view of the role of the state, the studies offered arguments in favor of the so-called developmentalist state, which plays an activist, interventionist and leadership role in sectors of the business community.

In this context, the discussion about state performance highlighted the role of bureaucracy. Research has focused on the autonomous performance of the state, its insulation in relation to the sectors of society and, at various times, its capacity to impose decisions against private sector preferences (Amsden, 1989). The developmental state that is especially evident in the experiences of the so-called "Asian tigers" of the post-World War II period is characterized by the performance of bureaucratic elites equipped with technical training recruited by meritocratic mechanisms that occupy strategic spaces to conduct high-level economic development policies performance (Leftwich, 1995).

More recently, the literature has turned to the design of a new emergent profile of state action from the end of the 20th century, associated with globalization, marked by the intensification of competition, the emergence of new standards of governance and pressures for democratization and transparency. Research continues to identify a strong role for the state, but it is carried out through flexible structures that mobilize innovation networks that connect local and international spaces (Riain, 2004).

The role of bureaucracy in this new context is to catalyze and articulate actors within and outside the state. The organization of the contemporary state tends to assume configurations in which its structures interpenetrate in a complex way with the society, in environments of democracy and political pluralism. This includes the adoption of negotiation and compromise procedures by the public administration, rather than imposition through rule and formal authority (Durant, 2000). Thus, the state's vision evolved towards a careful approach to the importance of governance in its administrative aspects, particularly those related to civil service reform, service

improvement, public sector restructuring and institutional strengthening (Ahrens, 2002).

The concept of state capacity has gained prominence in recent years due to the growing recognition of the importance of state action for national development. Precursor studies on the subject have turned to the understanding of the processes of formation of the national states, exploring the aspects of the construction of state capacities (Mann, 1988; Weiss and Hobson, 1995). The analysis then focused on state capabilities as requirements for the implementation of plans, programs and public policies, as well as the provision of goods and services (Grindle and Hildebrand, 1994; Grindle, 1996; Gomide et al, 2014). In addition, state capacity is considered as an indispensable ingredient for effective governance (Jreisat, 2012, Cingolani, 2013, Savoia and Sen, 2015). However, there is no consensus on the definition and form of state capacity measurement due to the multidimensional nature of this concept, as observed in the works of Hendrix (2010) and Cingolani (2013).

The model proposed for this research aims to study individuals and organizations that make up the public administration as an embodiment of the state in its functions of policy formulation and implementation. The model is based on a systematization of the dimensions of capacities, associated with the purposes of state action: analytical, managerial, internal coordination and political. These dimensions can be grouped into two macrodimensions, respectively, administrative and relational, considering their nature and dynamics. The administrative dimensions refer, predominantly, to the capacities accumulated and operationalized in the structures and processes that conform the organizations of the public administration. Relational dimensions, in turn, refer to capabilities that are constructed in a crucial way, through interactions established internally and externally to the public administration, involving bureaucrats themselves, politicians, representatives of society and other actors.

This model can be applied in empirical research by means of an analytical framework which considers the individual, organizational and systemic level of state capacity observation. The paper of Camões *et al* (2017) describe its details and discuss its theoretical foundations.

3. Research Agenda in progress

The National School of Public Administration (Enap) is a school of government in the federal government responsible for training and qualifying Brazilian federal civil servants. Enap fosters research on public management and public policy and has conducted surveys of federal public servants over the past three years. Two research initiatives were carried out: one with middle managers (Cavalcante and Lotta, 2015) and the other with civil servants in economic infrastructure (Freire *et al*, 2016).

Enap's research efforts stemmed from some existing resources at the federal level. The federal public administration is formed by 600 thousand active civil servants, distributed throughout the national territory. A computerized system is used for payment of salaries, vacation registration and other administrative records. Thus, the Brazilian federal government has a complete registry of federal public servants that was the source of information to identify the target audiences of the researches.

The objective of the surveys was to map the profile, professional trajectory and perceptions of civil servants about their work environment and the challenges faced in their professional performance. The public administration literature was examined to support the descriptive and exploratory issues that emerged from the research. Each research is detailed below, as well as their limitations.

3.1. Middle level bureaucrats

The Brazilian federal government has six different management levels. Thus, under the position of minister of state, there is a set of managers responsible for coordinating teams and advising leaders. The target audience for the survey, therefore, excluded the closest management level from the state ministers and kept all other levels in the survey. This design leaves out a set of civil servants that do not occupy commissioned positions, but that exert relevant functions of direction or of advice.

As presented previously, the questionnaire intended to meet descriptive and exploratory objectives. Although the federal government personnel system has basic information periodically published in bulletin format, other information such as professional trajectory and perceptions about government performance are not available in this system.

Respondents were identified thanks to the Government Authorities List (LAG), a mailing made by a private company dedicated to daily updating the telephone and e-mail contacts of senior managers and advisors. In addition, all ministries received a formal request for sending the mailing lists of managers and advisors from the lower echelons. The questionnaire was delivered to the entire target audience, through the internet, without a random sample draw. Of the 25,334 employees occupying commissioned positions, 7,223 answered the survey, which corresponds to 28.51% of the population.

The results show gender and race inequalities, with the predominance of men and whites in the occupation of positions, especially in relation to the higher levels of management. The appointments to the commissioned positions follow the changes of government. The professional trajectory indicates predominance of experience in the federal government itself. In relation to the professional performance, profiles were identified as “public managers responsible for complex stages of the policymaking process; advisors with access to the high organizational summit; managers and area assessors; specialized technicians; and administrative technicians, among other profiles” (Freire *et al.*, 2014: 65-66)..

According to the respondents, the biggest problem identified refers to people management issues: lack of technical competence, team size, instability in team composition, etc. Technical competence, experience and ties of trust are central factors for appointment in commissioned positions, which corroborates the finding that the higher the level of education, the higher the level of the position occupied.

3.2. Bureaucrats of economic infrastructure

This survey focuses on all ministries responsible for executing or financing any infrastructure initiatives that intertwine with public policies under their jurisdiction. The first challenge posed to the research was to delimit which civil servants of the infrastructure area should respond to the research questionnaire. In line with the qualitative work developed by the Institute of Applied Economic Research (Ipea), a federal government organization dedicated to the production of applied research, it was decided to include all the agencies and careers dedicated to planning, regulating and executing of infrastructure projects. Thus, respondents from regulatory agencies and other bodies responsible for the direct execution or monitoring of infrastructure

projects, such as environmental and heritage protection agencies, were included in the survey.

The survey questionnaire covered a significant part of the questions used by the survey on the middle managers. Thus, the focus was again on producing a descriptive and exploratory study, directly related to the initial knowledge of this set of public servants. In addition, the fields on training needs and job satisfaction were included.

In order to reach the target audience, some associations representing the careers linked to the infrastructure sector and all the agencies previously identified as relevant to the research were contacted. The e-mail contacts of the civil servants were requested. Thus, as in the previous survey, the entire target audience received the questionnaire online, without the use of a random sample. A number of 2,067 questionnaires were answered from 4,974 respondents, corresponding to 42% of the population.

The survey reveals an extremely technical profile, with almost all respondents with undergraduate level of education, the predominance of managers who are members of public careers, despite a relatively high turnover rate. The most common prior experience is in the federal government itself or in the private sector. The most frequent dialogue of respondents is with internal interlocutors to the organization and with private companies. For most of the respondents, there is no institutional support for carrying out activities of greater responsibility. Despite discrepancies in access to training, the courses conducted in general are identified as highly applicable to the work performed. The main problems identified by the respondents in their professional practice are the precariousness of the infrastructure projects, the inadequacy of the execution schedule and the political interference.

3.3. Limitations of the surveys

The surveys conducted by Enap have contributed to the promotion of new research tools in public administration, in addition to the use of administrative records and case studies. Some limitations, however, should be emphasized.

First, it was observed the absence of a large pre-test to validate the concepts and the questions used. The pre-tests adopted were limited to applying the questionnaire to a small group of respondents, who answered in a general way about the understanding of

the instrument. Although focus groups were organized for the research with public servants, the pre-test phase did not have the same breadth and analytical depth required for social science surveys.

In both surveys, there was no random sample draw. For the survey with the middle managers, a similar proportion was observed between groups of managerial positions and areas of government. For the research in infrastructure, a weight was applied to deal with differences in the proportion of respondents compared to the universe. However, the consequence of using a non-random sample is the existence of biases, since the respondents may have characteristics, observable or not, that interfere with the results obtained.

Other limitations refer to the absence of a theoretical accumulation on the part of the researchers involved to formulate and select the questions to be applied. This limitation may lead to imprecise measurements of sociological concepts such as "autonomy", "influence" and "professional performance". An example of this limitation is the impossibility of using some variables collected for the formulation of synthetic indexes, due to unsatisfactory results from factorial analysis.

Finally, the knowledge of the broad group of public servants in the federal government is gradual and cumulative, given the high complexity involved in this level of government. Defining the target audience to be searched for is a constant challenge. The research carried out suffered from errors of acceptance of respondents not suitable for the target audience and left out any relevant respondents for the research. Future efforts should be made from a more accurate study of the federal government's own personnel system database.

This brief synthesis on the research carried out in Enap is aimed to present reflections that can be directly used in the scope of current research efforts on public servants in Brazil and other countries.

4. The federal bureaucracy survey at ENAP and other researchs: explaining and comparing the frameworks

As a further development of the ENAP research agenda, a new survey is in course, regarding the entire federal bureaucracy. This section will show the research design for the survey and compare those choices with two other studies conducted for other researchers.

The SDG's are now a reality for many countries in the world. The program have 17 objectives and 169 goals to achieve, monitored by 230 indicators. This being a major challenge for the bureaucracies around the world. State capacity to implement the agreement agenda will be necessary accomplish the objectives and goals. The

In the pursuing of the ENAP bureaucratic capacities agenda, the opportunity to measure the states capacities in the SDG's context is a major opportunity in this scientific field. Furthermore, the continuous advancement of the methodological agenda will be necessary to consolidate the acquired expertise of the ENAP in the previous surveys.

The research design will be a survey with a stratified random sample among the non-clericals bureaucrats involved in the implementation of the programs related to the SDG's¹. The survey instrument will be a single questionnaire taking 30-45 minutes to response and taking account the dimensions and levels showed in the annex I. The definition of the dimensions was inspired in the works of Wu et all (2015), Ames (2017) e Pires e Gomide, 2015). The final framework is more extensive and inclusive than the sum of those works for specific purposes of the survey, but in this paper we will address to the comparability of the dimensions with the work of Wu (used By M. Ramesh in a survey in Indonesia) and Ames in a survey regarding the state bureaucracy in Brazil.

The first project is named "measuring policy capacity" and have the LKY School of Public Policy, National University of Singapore, as the main institution conducting the study. The long term idea is use the Wu et all (2015)² to create a usable survey framework to measure the bureaucracy in any country, adapting the questionnaires and constructing a comparable structure. The project collects data in two levels, personal and

¹ The Ministry of Planning made in 2015 a correspondence table between the SDG's and the programs in the federal budget. This table will be used to choose wich are the ministries, units and and careers will be used to the sampling

² The conceptual framework can be readed in the annex II of this work.

organizational and the respondents. The personal respondents are indicated by upper level managers and the sampling are not random and not stratified. The organizational respondents are a intentional sample within bureaucrats, with experience and skills. Besides that, the project analyses administrative documents to conceive a context in the organizational level. The dimensions of the data (or level of resources and skills and competences) are framed by the work of Wu, Ramesh and Howlett.

The other project, conducted by professor Barry Ames, addresses to a state level bureaucracy, and had started de collect phase. The survey have a big number of variables, looking at political and administrative dimensions. Specifically, the work collected data from 4 states, and will spread for others. The selection of respondents is not random, with the use of all responses they collect. Inside the questions, various are related to the coordination and autonomy issues.

In other words, enap is building an adapted framework to take account of those new trends. This framework (Annex I) will help the ENAP to embed new perspectives on the study of bureaucracy. Specially in this case, the levels and competences (Wu et all, 2015) and the dimensions of coordination and autonomy (Ames, 2017) area usefull to the purpose.

5. Discussion

The late works on state capacities still looking at the classical Weberian variables to seek state capacities in the bureaucracy. However, some innovations are included, with new conceptual frameworks, and challenges. In the federal bureaucracy survey for state capacities to implement the SDG's the ENAP is incorporating the new trends in the field and developing an iterational approach, closing the gap between those works and the ENAP research agenda. In this effort, the survey is getting other conceptual frameworks to compare the results. This approach turns the task of survey modeling a careful and cautious work, with a need if a fine tuning in the craft of the survey instruments.

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Annex I – Conceptual framework of the ENAP survey

DIMENSIONS		Administrative		Relational		Autonomy
		Analytical	Managerial	Coordination	Political	
LEVEL OF RESOURCES	Individual	Individual Analytical	Individual Managerial	Individual Coordination	Individual Political	Individual Autonomy
	Organizational	Organizational Analytical	Organizational Managerial	Organizational Coordination	Organizational Political	Organizational Autonomy
	Systemic	Systemic Analytical	Systemic Managerial	Systemic Coordination	Systemic Political	Systemic Autonomy

Source: Koga et al (2017)

Annex II – Wu et all (2015) Framework

Levels of Resources		Skills and Competences		
		Analytical	Managerial	Political
	Individual			
	Organizational			
	Systemic			

Source: Wu et All (2015)