ASSESSMENT OF PUBLIC MANAGEMENT MODERNIZATION’S IMPACTS ON BRAZILIAN STATES’ PERFORMANCE

Mychelle Celeste Batista de Sá*, Luiz Paulo Lopes Fávero**

Abstract

This study analyzes the relation between the public sector’s strategic management resources and Brazilian states’ performance. The Resource-Based View (RBV) serves as the theoretical foundation for the research. The study was carried out in a sample of 20 Brazilian States, obtained through the application of a structured survey questionnaire to State Secretaries of Administration, Planning, Treasury, IRS, Education Health and Safety. Variables related to strategic management resources were obtained from the questionnaire and from government agencies. Through correspondence and homogeneity analyses, it was verified that the best budget, economic-financial and social development indicators are associated with those states that display good assessment of organizational management culture, citizen-oriented view, human capital and information systems management.

Keywords: Management Reform, Resource-Based View, Performance, Public Sector

1. INTRODUCTION

This research is based on the administrative management reform of the State, which started in the 1980’s in the United Kingdom and continues until today. This reform presented the conception that the identification and development of each State’s specific strategic management resources is related with public organizations’ enhanced performance when administered jointly. The existence of these resources is supposedly responsible for the State’s enhanced performance.

As strategic management resources exist in the public sector – which may or not be a source of competitive advantage – and as the management reform considers that the management of these resources makes the State more efficacious, efficient and effective; this research intends to answer the following research question: what is the relation between strategic management resources in the public sector and Brazilian states’ performance?

Barzelay (2001, p. 3) reports that accounting specialists were anxious to adapt management accounting concepts, including performance management, in public organization management. This is a leading research line in international accounting, representing 28% of papers published in the main management accounting journals. Despite this relevance, there are still few management control studies on service and non-for-profit organizations. (CHENHALL, 2007).

Some studies descriptively assess the implementation of NPM concepts in different countries and whether this implementation attends to the main characteristics of the management model. These studies, however, are limited to considering the reform initiative successful or not, without reporting on its impact on the country, state or local entity’s performance.

Finally, the results of previous studies (SÁ; FAVERO, 2008) indicated that fiscal performance is related with the resources the NPM addresses in Brazilian states. These results contributed to deepen the research, increasing the scope of resources verified and analyzing other performance factors the public management reform could influence, such as social development.

11 This term is often considered a synonym of management control.
2. LITERATURE REVIEW

The New Public Management (NPM) model departs from the idea that the application of techniques and concepts companies use can contribute to improve governmental performance. That is the case because these techniques and concepts could provide the public context with the efficiency, efficacy and effectiveness it needs to fulfill its objective.

**Chart 1. Definitions of New Public Management**

<table>
<thead>
<tr>
<th>Author</th>
<th>Definition</th>
</tr>
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<tbody>
<tr>
<td>Osborne and Gaebler (1995)</td>
<td>The management reform is a basic paradigmatic change, which departed from the New Deal paradigm between 1930 and 1960, towards the entrepreneurial governmental model that currently stands out.</td>
</tr>
<tr>
<td>Barzelay (2001)</td>
<td>It is an abbreviated expression academics and professionals regularly use to refer to distinct public service management themes, styles and patterns that came up in the last two decades, notably in the United Kingdom, Australia and New Zealand. It is, however, a source of controversy.</td>
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<tr>
<td>Pollitt (1995)</td>
<td>Managerialism is a set of beliefs and practices, through which one permits better management, guided by efficiency to sole economic and social problems.</td>
</tr>
<tr>
<td>Brasil (1995)</td>
<td>Is a broad project that relates to different government areas, with a view to increasing its governance, i.e. its capacity to efficiently put in practice public policies.</td>
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</table>

12 In this chart, the terms: management reform, managerialism, new public management were used as synonyms.
Some experts and professionals, however, have questioned this premise because they consider that the public and private sectors are different. These “similarities and differences between the public and private sectors have frequently been debated in the literatures on public administration, politics and economics” and there is no consensus about them (BOYNE, 2002, p. 98). Older literature tends to focus on differences, while more recent literature more intensely discusses similarities (KNOTT, 1993).

According to Bozeman (1987), however, all organizations are public because they contain, to a greater or lesser extent, public sector characteristics. In addition, Boyne (2002, p. 98) also states that “his arguments [by Bozeman (1987)] imply that, in principle, an equally valid conclusion would be: ‘all organizations are private.’”

In the same line, Poole et al. (2006) argue that different visions exist in literature about the difference between public and private. This can be a convergence in the same sense, however, in which the public and the private are still different, but are gradually becoming alike. Either through the search for a private management model for the public sector, like the NPM; or through the introduction of regulatory mechanisms, social accountability concepts, stakeholder theory itself, as well as the idea of partnership, in the private sector. Van der Wal et al. (2008) also verified that the public and private sector share the same values, in a research carried out among public and private managers in Holland: accountability, expertise, reliability, effectiveness and efficiency.

Current studies about the differences between the public and the private and, hence, the impossibility of applying private sector techniques and concepts to the public sector due to the incompatibility of organizations, values and management forms, tend to deny this premise, however, without confirming the possibility of a simple transposition from one to the other. According to Kettl (1997), NPM proved that the use of private sector ideas can improve the public sector’s problem-solving strategy and competency, without the public losing its goal.

Although taken from literature about strategy in the private sector, the understanding of competitive advantage can be applied to the public sector when assuming that local public authorities compete for economic, social, political resources, among others (CARMELI, 2006, p. 123), to attract businesses (companies), inhabitants with high purchasing power and to develop projects, so as to increase revenues and reduce expenses. (CARMELI, 2006).

In the strategic management area, studies by Ramos-Rodríguez and Ruiz-Navarro (2004) put Michael Porter at the forefront of literature that influenced research until the year 2000. Together with those studies, the papers by Wernerfelt (1984) and Barney (1991) were included among the 20 most influential works (RAMOS-RODRÍGUEZ; RUÍZ-NAVARRO, 2004). In Brazil, the research by Walter and Silva (2008) found similar evidence.

The contribution of the resource-based view (RBV) in strategic management emphasizes the company’s specific resources, which are the true source of organization’s sustainable competitive advantage and above-normal performance (BARNEY, 1991; WERNERFELT, 1984).

The RBV assumes that success is a function of the resources and skills an organization gains or develops and this performance is related with these firms’ ability to create competitive advantages that can distinguish them from other competitors, through continuous higher returns (WERNERFELT, 1984; BARNEY, 1991).

To determine whether resources are sources of competitive advantage, they should essentially be: valuable, rare (BARNEY, 1991), imperfectly imitable (BARNEY, 1991; DIERICKX; COOL, 1989), irreplaceable (BARNEY, 1991; DIERICKX; COOL, 1989), and non-transferable or tradable (DIERICKX; COOL, 1989). And these sources of competitive advantage were identified as tangible and intangible resources firms own and which allow them to reach and put in practice their strategies (BARNEY, 1991; DIERICKX; COOL, 1989; WERNERFELT, 1984).

Despite acknowledging that an organization’s performance variations can derive from other factors – such as institutional and political formats, a clear responsibility division among governmental spheres, financial resource allocation, the state’s size in terms of inhabitants, considering public organizations (CARMELI; COEHN, 2001) – the scope of this research is the influence of strategy on the State’s performance.

Therefore, the background for this research are the management reforms of the public sector, which are based on organizational, administrative and strategic theories, economic and public policy theories, besides control and accounting, attempting to apply and develop these theories to enhance the State’s performance and offer higher returns on investments to citizens (BARZELAY, 2001). This does not only regard these theories’ introduction, but also their interpretation and adaptation to produce similar effects, increasing the State’s resource management performance.

3. METHOD

This is an empirical-analytical study. Data were collected through a survey, considering a structured questionnaire with closed questions, with evaluations ranging from zero to 10 as answers. This questionnaire aimed to survey data on the modernization of Brazilian public management.

With a view to using variables related to the states, the secretaries’ answers were condensed, using the statistical measure of MEDIAN position. The
variables that identify the public sector’s strategic management resources were defined based on the studies by Abraham Carmeli and on the characteristics of the management reform. The analysis used the universe of Brazilian states with a view to working with census. The collected data, however, permitted the inclusion of only 20 Brazilian states, which were: Acre, Alagoas, Amazonas, Bahia, Ceará, Espírito Santo, Goiás, Minas Gerais, Mato Grosso do Sul, Pernambuco, Piauí, Paraná, Rio de Janeiro, Rondônia, Roraima, Rio Grande do Sul, Santa Catarina, Sergipe, São Paulo and Tocantins.

**Chart 2. Management Resources**

<table>
<thead>
<tr>
<th>Management Culture</th>
<th>Citizen-Oriented View</th>
<th>Human Resources</th>
<th>Information System</th>
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<tbody>
<tr>
<td>The performance of different organizational levels is assessed (CULT1).</td>
<td>The main access channels are informed to citizens-users (CID3).</td>
<td>Workers and employees are trained to allow them to perform their work successfully (RH2).</td>
<td>The main information systems are defined, developed, put in practice and updated with a view to attending to the secretary and users’ identified needs (SIST1).</td>
</tr>
<tr>
<td>Managers make decisions, communicate and put in practice actions, guaranteeing all stakeholders’ involvement (CULT2).</td>
<td>Citizens-users’ formal and informal complaints and suggestions are addressed (CID4).</td>
<td>Workers and employees have adequate professional experience to perform their work successfully (RH3).</td>
<td>Information management is used to enhance the organization’s integration with its citizens-users, society, suppliers and partners (SIST3).</td>
</tr>
<tr>
<td>Organizational goals are clear to all members (CULT3).</td>
<td>The main actions deriving from complaints and suggestions are informed to the citizens-users (CID5).</td>
<td>Workers and employees have professional skills to perform their work successfully (RH4).</td>
<td>The collected information is used to enhance improvements in the secretary’s performance (SIST4).</td>
</tr>
<tr>
<td>Managers are concerned with the transparency and governability of their decisions (CULT4).</td>
<td>Workers and employees have an adequate educational background that enables them to perform their tasks (RH1).</td>
<td>Employees are committed to and maintain a high sense of responsibility towards the organization (RH5).</td>
<td>Information management is used to support compliance with the institutional mission (SIST2).</td>
</tr>
<tr>
<td>Workers and employees are stimulated to generate new ideas, seek innovations and improvement (CULT5).</td>
<td>Strategies are communicated to stakeholders with a view to establishing mutual commitments (CULT9).</td>
<td>Leaders are assessed and stimulated regarding the competencies the organization wants (RH6).</td>
<td>The information system is used to support the decision-making process (SIST5).</td>
</tr>
<tr>
<td>Managers are accountable for their actions and results achieved (CULT6).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workers and employees’ participation level in processes, decisions and their practice is high (CULT7).</td>
<td></td>
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<tr>
<td>Managers act personally in the search for new opportunities for the organization (CULT8).</td>
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<tr>
<td>Out of 42 respondents who were taken into account, 23 are State Secretaries, representing 54.8% of the sample. Most participants are public servants (64.3%), male (66.7%), with an average 19.0 years of experience in the public sector, despite an average 18.2 years of experience as managers and an average age of 49.0 years. Participants hold a higher education degree, mostly in Economics (38.1%), Administration (7.1%) and Accountancy (7.1%). The public sector performance can be evaluated considering three aspects: input, output and outcome (Trosa, 2001). In this study, we...</td>
<td></td>
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</table>
considered the prospect of inputs related to financial performance and the outcomes related to the impact of public policies for the modernization of management in society as a whole.

The HDI has been used as a way to measure the impacts of public policies in society. This indicator was obtained from data from the Brazilian Central Bank for the year 2007. Financial performance was measured through the following ratios:

- **Financial independence (FI):** Net revenue from transfers/Total revenues (CARMELLI, 2002; CARMELLI; TISHLER, 2004; FREIRE et al., 2007);
- **Liquidity ratio (LR):** Financial assets/financial liabilities (CARMELLI, 2002; CARMELLI; TISHLER, 2004; FREIRE et al., 2007; GARCÍA, 2003);
- **Total Expense per capita (TEPer):** Total executed expense/number of inhabitants (GARCÍA, 2003);
- **Investment Expense per capita (IEPer):** (Financial funding expense + investment expense)/number of inhabitants (GARCÍA, 2003);
- **Debt per capita (DPer):** Total debt/number of inhabitants (GARCÍA, 2003);
- **Indebtedness Ratio (IR):** Debt from credit operations/total current revenues (GARCÍA, 2003).

These ratios were taken from secondary sources obtained from the State Budget Execution database (1995-2008), from the National Secretary of the Treasury (STN), besides estimated population statistics from the Brazilian Institute of Geography and Statistics (IBGE), for 2007.

4. RESULTS

To analyze the relation between the public sector’s strategic management resources and Brazilian states’ performance, multivariate interdependence techniques were used, given that sophisticated dependence relationship models could not establish an optimal relation, despite appointing some variables’ dependence through the analysis of the bivariate regression technique, due to the sample size which, although representative, is not sufficient to accomplish dependence studies.

Homogeneity analysis does not establish causal relations. It is a multivariate technique directed at categorical variables, with a view to visualizing associations among the variables, permitting the construction of a perceptual map: a visual representation of one respondent’s perceptions. (HAIR JUNIOR et al., 2005).

This exploratory technique is based on the (qualitative/categorical or categorized quantitative) variables’ frequency distribution. For this study, the variables FI, TPerE, IPer, DPer, IR, LR and HDI were categorized, using quartile separation to compose each category. Other variables (CULT, CID, RH, e SIST) were categorized as follows:

- score < 5 points;
- 5 points ≤ score < 7 points;
- 7 points ≤ score < 9;
- and score ≥ 9 points.

The assumption of the technique is that the variables, two by two, are not independent. To do so, one can reject the null hypothesis of the Chi-square test, which checks the equality of frequencies, i.e., no interdependence between the variables. The variables chosen were CULT2, CULT5, CULT7, CULT8, CID4, CID5, RH2, RH3, RH4, RH6, SIST1 and SIST3. The variables FI, TPerE and SIST1 were suppressed from the analyses as they were not relevant in any of the two dimensions. (PESTANA; GAGEIRO, 2005, p. 215).

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13 Where: i ranges from 1 to 9; j ranges from 1 to 5; k ranges from 1 to 6; m ranges from 1 to 5.
Table 1. Relation between PERFORMANCE and RESOURCE variables

<table>
<thead>
<tr>
<th>Variables scoring 9 points or more</th>
<th>80% or more of the sample in this quartile</th>
<th>χ²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citizens-users’ formal and informal complaints and suggestions are addressed</td>
<td>0.42 &lt; FI &lt;= 0.66</td>
<td>0.070</td>
</tr>
<tr>
<td>The main actions deriving from complaints and suggestions are informed to the citizens-users</td>
<td>IE &gt; 252</td>
<td>0.059</td>
</tr>
<tr>
<td>Information management is used to enhance the organization’s integration with its citizens-users</td>
<td>807 &lt; D &lt;= 1,669</td>
<td>0.044</td>
</tr>
<tr>
<td>The main information systems are defined, developed, put in practice and updated with a view to attending to the secretary and users’ identified needs</td>
<td>1.77 &lt; LR &lt;= 2.53</td>
<td>0.024</td>
</tr>
<tr>
<td>Workers and employees are stimulated to generate new ideas, seek innovations and improvement</td>
<td>0.77 &lt; HDI &lt;= 0.79</td>
<td>0.025</td>
</tr>
</tbody>
</table>

The test establishes valid associations among the variables as presented in Table 1. The sample’s eigenvalue defines total variance as explained by the dimensions. After suppressing the CID variable, the value found was 90.0% (fit), 56.1% explained by dimension 1 and 33.9% by dimension 2. The perceptual map shown in Attachment 1 reveals two groupings of categorical variables. These two groupings, A and B, are characterized by the relevant presence of the RESOURCE variables, mostly scored higher than 9 and between 7 and 8.99, respectively.

Chart 3. Grouping of variables

<table>
<thead>
<tr>
<th>RESOURCES</th>
<th>GROUPING A</th>
<th>GROUPING B</th>
<th>NO GROUPING</th>
</tr>
</thead>
<tbody>
<tr>
<td>HDI</td>
<td>Score ≥ 9</td>
<td>7 ≤ Scores &lt; 9</td>
<td>Score &lt; 7</td>
</tr>
<tr>
<td>IE</td>
<td>IE &gt; 252</td>
<td>78 &lt; IE ≤ 252</td>
<td>IE ≤ 78</td>
</tr>
<tr>
<td>D</td>
<td>D ≤1,669</td>
<td>1,669 &lt; D ≤ 3,131</td>
<td>D &gt; 3,131</td>
</tr>
<tr>
<td>IR</td>
<td>0.53 &lt; IR ≤ 1.48</td>
<td>1.48 &lt; IR ≤ 3.09</td>
<td>IR &gt; 3.09 and IR &lt; 0.53</td>
</tr>
<tr>
<td>LR</td>
<td>LR &gt; 1.77</td>
<td>LR ≤ 1.77</td>
<td></td>
</tr>
</tbody>
</table>

It is observed that, in general, associated with these RESOURCE variables are PERFORMANCE variable categories with a relatively high HDI, investment expense and financial funding of more than R$ 78 per capita, total debt per inhabitant below R$ 3,131, indebtedness ratio between 0.53 and 3.09 times the amount or net current revenues from current transfers.

Extreme categories of HDI and IR are dispersed or connected with the origin, as well as low investment in infrastructure and high indebtedness. Associated with these are the RESOURCE variable categories that scored below 7 points.

5. FINAL CONSIDERATIONS

Strategic management resources were examined in a study on the RBV as a source of competitive advantage and responsible for performance distinctions among organizations. Few international studies have inserted the RBV in the public context and this relation was not found in Brazil.

According to this construct, public management reforms based on the NPM model have offered the governmental entity a strategic view that had only been witnessed in the private context that far. It is through the use and management of strategic management resources, with are rare, valuable, irreplaceable, non-imitable, that States’ financial and socioeconomic performance is altered, in the distinguished promotion of efficiency, efficacy and effectiveness in public performance.

The research also identified strategic management resource variables through the application of a structured survey questionnaire. The main goal of this questionnaire was to capture State Secretaries’ perception of public management as it takes place in Brazilian states, which reveals to be a research innovation due to its range.
Finally, the research aimed to describe the existing relation between strategic management resources and public sector performance and this aim was achieved through multivariate interdependence analysis methods (correspondence and homogeneity analysis).

The research demonstrated that the best budget, economic-financial and social development ratios are associated with states with good organization management culture, citizen oriented view, human capital and information system management scores.

This study was limited by its analytic scope, which mainly involved federal states, although public policies are actually put in practice at municipal level. For future studies, the analysis should be extended to all subnational entities and to the Union, and can even compare the modernization states in the public management reform, in view of differences between public spheres.

This was not a predictive research. The intent was to describe the sample and appoint signs for future studies. Thus, the findings cannot be generalized, nor can inferences be made about any other sample. The study is limited to the Brazilian federal states, considering the resources addressed in the questionnaire and the expressed performance variables, as well as the perceptions of the secretaries currently in office at state level.

Despite its limitations, the research enhances reflections on results achievement. Within the academic area, the findings stimulate research on public performance, relating it with strategic choices and development of strategic management resources, especially regarding organizational culture, human capital, focus on citizens and information system management, which were addressed by the management reform. This involves bringing into the public sector behavioral issues that directly or indirectly affect organizational performance.

Other relevant evidence is the identification of resources that represent a source of sustainable competitive advantage in the public sector from an RBV perspective. For public management, in practical terms, the study enhances reflections on the cost/benefit relation of creating strategic management resources. As established resources can be less costly to manage and develop than obtaining others in the market (BARNEY, 1986), this implies the mapping of skills, abilities, competencies that can be a source of competitive advantage in the public sector, enhancing performance, however, without representing higher spending.

From the perspective of public organizations, the research results contribute to ratify the development of organizational culture, which uses managerialism as a model. This implies advances in the formulation and implementation process of public policies and the creation of new performance identification and measurement mechanisms to monitor social programs.

Metcalfe (1993) positively assesses the management reform Thatcher started during her first mandate and which extended across four more mandates, successfully finished in the 1980’s. According to the same author, today, questions should be asked about what form of public management is more appropriate, instead of other questions that want to know, among other aspects, whether the administrative reform is relevant or not. The present research intended to appoint some routes this study can follow.

References

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ATTACHMENT

PERCEPTUAL MAP