

THE RELATIONSHIP BETWEEN MUNICIPAL MANAGEMENT EFFICIENCY AND PUBLIC TRANSPARENCY IN RONDÔNIA - BRAZIL

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ABSTRACT

This study analyzes the relationship between municipal development and improvements in transparency and public governance in the state of Rondônia, with an emphasis on accountability. Data were collected from the National Transparency Ranking of the Federal Public Prosecutor's Office and the 2016 FIRJAN Municipal Development Index. The sample included 52 municipalities in the state of Rondônia. Variables such as urbanization, population density, Municipal Management Effectiveness Index, municipal GDP per capita and Human Development Index were considered. The analysis consisted of applying a linear regression to explore the relationship between these variables and the transparency ranking. The results indicated a significant positive relationship between the effectiveness of municipal management and the transparency ranking. Factors such as urbanization and population density were also found to be relevant, suggesting that more urbanized and densely populated municipalities tend to have more transparent government practices. This study contributes to the academic debate on accountability in public administration, highlighting the importance of transparency and accountability in public management. The conclusions underline the need for policies aimed at strengthening the effectiveness of municipal management, socioeconomic development and citizen participation, with the objective of improving public governance and strengthening the pillars of democracy.

KEY WORDS: Public management; Accountability; Transparency; Municipal Management Efficiency.

RESUMEN

Este estudio analiza la relación entre el desarrollo municipal y las mejoras en la transparencia y la gobernanza pública en el estado de Rondônia, enfocándose en la rendición de cuentas. Los datos provienen del Ranking Nacional de Transparencia del Ministerio Público Federal y del Índice de Desarrollo Municipal FIRJAN de 2016, incluyendo 52 municipios de Rondônia. Se consideraron variables como la urbanización, densidad



demográfica, el Índice de Eficacia de la Gestión Municipal, el PIB per cápita y el Índice de Desarrollo Humano. El análisis implicó una regresión lineal para explorar la relación entre estas variables y la clasificación de transparencia, revelando una relación positiva significativa entre la eficacia de la gestión municipal y el ranking de transparencia. Factores como la urbanización y la densidad demográfica resultaron relevantes, sugiriendo que municipios más urbanizados y densamente poblados tienden a tener prácticas de gobierno más transparentes. Este estudio aporta al debate académico sobre la rendición de cuentas en la administración pública, resaltando la importancia de la transparencia y responsabilidad en la gestión pública. Las conclusiones enfatizan la necesidad de políticas para reforzar la eficacia de la gestión municipal, el desarrollo socioeconómico y la participación ciudadana, buscando mejorar la gobernanza pública y fortalecer los pilares de la democracia.

PALABRAS CLAVE: Gestión Pública; Rendición de Cuentas; Transparencia; Eficacia de La Gestión Municipal.

INTRODUCTION

Accountability has become a cornerstone of modern democratic governance (Bovens, 2006). This concept has been a central topic in the debate on public policies worldwide (Mainwaring, 2003). The lack of a precise meaning has led authors from different nationalities to outline various approaches and mechanisms for accountability, tailored to different models of public administration (Bovens, 2006; Schommer et al., 2015). The term accountability, of Anglo-Saxon origin and still without a direct translation into other languages, is often translated in Brazilian literature as "responsabilização", as pointed out by Amaral and Pinho (2008), Ceneviva (2006), and Rocha (2008).

At its core, accountability is a form of control, and the mechanisms promoting it are considered key indicators of the quality of a democracy (Cubas, 2010; De Souza, 2021). However, its feasibility depends on a clear separation between the governed and the governors, with a delegation of authority that allows for the evaluation of performance and the application of sanctions when necessary (Park, 2020).

In a democratic regime, the sovereignty of the people must prevail, and accountability implies new responsibilities: i) for citizens, to maintain constant vigilance over the use of power granted to those who govern them; and ii) for rulers, to account for their actions to the citizens who elected them (Rocha, 2008).

The two main challenges to improving accountability in the public sector are the excessive concentration of power in the hands of the executive and the weakness of the mechanisms for representation and citizen participation (Abrucio & Loureiro, 2004). From a legal standpoint, a significant advance was the approval of the Fiscal Responsibility Law -

Complementary Law 101/2000 (Brazil, 2000), which establishes public finance norms aimed at responsibility in fiscal management.

Considering that the expectations and demands of citizens often focus on the state entity, the need for constant control and evaluation of the management of resources and the allocation of public money becomes imperative (Agostineto & Raupp, 2010). However, when visiting a public work or accessing the transparency portal, it is easy to verify that access to this information is often poor or difficult.

This scenario was evidenced in the second evaluation of public transparency conducted by the Comptroller General of the Union (CGU) in 2020, which assessed capitals and Brazilian municipalities with more than 50,000 inhabitants (CGU, 2020). In the evaluation, the capital of Rondônia, Porto Velho, scored 9.7. In a questionnaire covering active and passive transparency, two criteria were not met: the availability of consultation for monitoring public works and the list of the municipality's open database.

This study aims to contribute to the debate on accountability. Pereira et al. (2014) concluded, after analyzing scientific production on accountability in Public Administration, that studies in Brazil are still incipient, even in the face of the new paradigm of managerial public administration, or New Public Management. In this context, public governance gains relevance for the improvement of public administration, stimulated by social control of accountability and accounting, whether of the political or administrative function, with greater inclusion of citizens in the process of instituting and supervising public policies, where indirect democracy is guaranteed by the Constitution of the Republic.

The construction of knowledge and its efficient use, especially regarding the role of the citizen in public management, is a challenge to overcome, particularly in the case of Brazil, as reflected by Salles (2014) considering the country's characteristics and its history of centralizing policies. Thus, the aim of this study is to analyze the relationship between municipal development and improvements in transparency and public governance in the state of Rondônia, addressing the following research problem: What is the impact of municipal development on the Municipal Management Efficacy Index (IEGM) in public transparency? This research is justified by the need to understand and analyze the intensity of the relationship between the development indicators of the municipalities of the state of Rondônia and the quality of transparency and public governance, in order to understand how accountability affects the behavior of these variables.

This study concludes that, in general, municipalities that present better levels of efficacy in public management, higher population density, and human development tend to achieve better results in public transparency, as demonstrated by the National Ranking of Public Transparency. This pattern suggests that efficacy in management and social progress may be crucial factors in promoting greater transparency.

A deeper understanding of accountability could have a significant impact on improving accountability and governance, as well as on enhancing the information available on transparency portals. This improvement is fundamental for elected officials to be accountable and for ordinary citizens to effectively oversee government actions. Thus, this study aims to contribute not only to the academic debate but also to the practice of public governance, highlighting the importance of transparency and accountability in public administration.

THEORETICAL FRAMEWORK

This topic aims to systematize the elements that support the theoretical construction of the subject, addressing various aspects of accountability, public management, transparency, the Index of Transparency and Public Governance, and the National Ranking of Transparency of the MPF. This effort allows for a broader understanding of the topics addressed.

Accountability

Accountability refers to the concept of being accountable for actions taken and the need to account for the management of public goods, values, and money (Pinho & Sacramento, 2009). In other words, it is associated with the existence of an actor with formal authority to oversee or penalize public agents (Mainwaring, 2003). In this context, political accountability can be promoted by two types of actors: i) voters, who demand accountability from elected officials, especially in cases of reelection; and ii) public agencies formally charged with overseeing and penalizing public officials.

Miguel (2005) emphasizes that electoral accountability refers to the ability of citizens to impose sanctions on rulers, re-electing those who perform well and removing those who do not. In a democracy, the ruler is subject to three types of accountability: two vertical - electoral and societal (where groups mobilize the legal system for demands related to the prevention, repair, or punishment of illegalities (Fonseca, 2016; O'Donnell, 1998) - and one horizontal, exercised by state institutions responsible for preventing, repairing, and punishing illegalities committed by public officials.

Accountability is defined in three specific aspects: i) information about the actions of a public official; ii) justification of these actions and decisions; and iii) punishment or compensation based on the assessment of this information and justification (Morlino, 2010). Although accountability is fundamental for the preservation of democracy, the active participation of citizens is indispensable for its realization (Rocha, 2008). Being a citizen in a democratic regime implies social rights and obligations, including participation in activities related to the selection and supervision of rulers (Roberts, 2004).

Accountability also manifests in the daily lives of agents and public organizations, not

only in the different instances of internal control of the State but also through control exercised by the press, civil society organizations, and citizens, whose actions in some way result in some form of restriction or sanction (Rocha, 2008).

Public Management

Managing in the public sector involves administering public goods and providing services to society (Ferreira, 1999). Public management encompasses planning, organizing, directing, and controlling public goods and interests, in accordance with administrative principles and with a view to the common good (Santos, 2015). Thus, the study of public management allows for the analysis of the administrative and governmental system, contributing to the feasibility of public policies and projects across different spheres (Pires et al., 2020).

Public management must be part of an integrated development project, strategically focused on improving organization, management information, and people's training (Nascimento, 2014). Therefore, the challenge of public management is how to transform bureaucratic, hierarchical structures prone to isolation into flexible, entrepreneurial organizations (Guimarães, 2000).

The bureaucratic model is based on formality, professionalism, and impersonality (Secchi, 2009), characterized by the integration of activities with an emphasis on hierarchical control, continuity, stability, and adherence to internal norms (Mozzicafreddo, 2002). There is a horizontal and vertical distribution of state functions, and the hierarchical design adopts the form of a pyramid, with top management at the apex and officials at the base. All this is supported by the coordination and control of activities at different organizational levels.

New Public Management (NPM) proposes alternatives to the bureaucratic model, focusing on efficiency, public spending savings, and service quality (Pereira Neto & Borges, 2017). NPM is summarized in five principles: focus on the citizen/client, orientation towards results, emphasis on social control and transparency, contracting out and flexibility of management, and valuation and development of people (Martins & Marini, 2010).

The basic principles of Public Administration, according to Article 37 of the Federal Constitution of 1988 (Brazil, 1988), are legality, impersonality, morality, publicity, and efficiency. Coura and Carvalho (2017) highlight the importance of indicators for monitoring public sector activities, which allows for an understanding of the strategies and actions adopted.

The demand for greater control in public organizations arises from citizens' dissatisfaction with representative democracy, which drives the development of an accountability system to lend greater credibility to government programs (Pereira Neto & Borges, 2017). The positive side of this demand has been the strengthening of control in

public sector organizations, with the aim of ensuring the development of an accountability system intended to lend greater credibility to government programs and actions.

In this context, we advocate for the existence of independent or autonomous external control bodies that can, if not guarantee, at least promote the constant improvement of accountability and efficient use of public resources (Nino, 2010). It is also suggested that these institutions take on a new role in interacting with society, as they are considered predominantly technical (Nino, 2010). However, there is no clear and precise definition of what public policies are, but the most accepted concept is that decisions and analyses of public policies need to answer the following questions: who gains what, why, and what difference does it make? (Souza, 2022).

To avoid appearing simplistic, (Agum et al., 2015) summarize public policies as the field of knowledge that seeks to simultaneously "put into action" the government and/or analyze that action and, if necessary, suggest changes to the course of those actions. The development of public policies is a stage through which democratic governments materialize their government plans into programs or actions that result in benefits for society.

Likewise, efficient public administration increases the credibility of managers, promotes societal participation, encourages democratic practices, and facilitates public understanding (Zambam et al., 2023). Integrating both vertical and horizontal accountability aligns the activities of the State, rulers, and institutions with the needs of the population, directly impacting daily life and, in particular, the effectiveness of public policies (Zambam et al., 2023).

Monitoring and Control

In addition to managing contracts, managers must be aware of the changes and impacts that these bring (Carvalho et al., 2017; Jastramskis, 2024). Law 8.666/93 specifies that the monitoring and supervision of contract execution must be carried out by a representative appointed by the Administration, with the support of third parties if necessary (Brazil, 1993). Mondo et al. (2019) highlight that, in principle, any citizen can exercise social control of public policies, including the monitoring of public works. Due to their complexity, public works may represent a greater monitoring challenge for social control agents. The authors suggest that monitoring public works can be more effective when carried out by working groups, ideally with the collaboration of at least one professional in the field of engineering or architecture. For civil society organizations that lack professional or technical volunteers, it is recommended to seek alliances with universities or professional associations.

The Organization for Economic Cooperation and Development (OECD) underscores the importance of citizens and civil society taking on greater responsibility and establishing

new partnerships with the public sector (OECD, 2011). This collaboration is essential for future reforms in public administration, a trend that has been driven by the use of social networks, collaborative initiatives, reinterpretation of government open data, and technological advances (Pereira Neto & Borges, 2017).

Transparency

Transparency in public management is defined as an institution's effort to make its daily operations and the resulting data accessible to the public (Braga, 2011). In this context, the performance of public managers is crucial as they seek to legitimize their governance through a transparent stance and openness to popular participation (Andrade Filho & Andrade, 2019).

Although the concept of transparency has been widely discussed and valued in the international political and public sphere, we still lack a defined method for evaluating the transparency of procedures used to implement public policies, such as laws and regulations (Beblavý et al., 2022). However, effective management of resources for health, education, employment, and income generation is crucial, potentially more so than the amount of money invested (Ribeiro & Zuccolotto, 2014). In Brazil, the Transparency Law (LC No. 131/2009) aims to ensure the real-time disclosure of all public entities' income and expenses via a website, setting up transparency as a hallmark of public administration open to the public (Birkinshaw, 2006). Yet, transparency is not achieved when decisions, along with their implications, decision-making processes, and consequences, are inaccessible (Black et al., 2009).

Zuccolotto and Teixeira (2017) explain that transparency is built from three essential components: an observer, something that can be observed, and the means or methods to carry out this observation. For the transparency cycle to be effective, these three elements must be present at the same time, as the absence of any of them endangers the process. The authors emphasize that, in addition to the presence of these elements, it is crucial for the information to be understandable to as many users as possible. This does not mean that everyone will understand it perfectly, due to cognitive barriers that may arise. To overcome these difficulties, public and private bodies such as investment agencies, NGOs, and universities have acted as intermediaries in the information transmission process (Zuccolotto & Teixeira, 2017).

Even if the information is relatively understandable, it is not complete if users cannot easily access it. In this regard, ease of access to information is also a fundamental requirement to characterize transparency (Zuccolotto & Teixeira, 2017). As for the issue of information and compliance, communication methods and new information and communication technologies (ICTs) have offered great possibilities to increase transparency

and, consequently, accountability.

Thus, the Access to Information Law (Law 12.527/2011) regulates access to public information, establishing procedures for the Federal Government, States, Federal District, and Municipalities. This law guarantees citizens' right to request public interest documents without the need for justification. It also requires that public bodies and entities have a website with an "Access to Information" section, containing the mandatory minimum content, and a Citizen Information Service (SIC) for online and in-person requests (Brazil, 2011).

Pereira Neto and Borges (2017) highlight the importance of access to governmental data to enhance citizens' experience, emphasizing that such access is crucial for transparency and accountability. For Maier-Rabler and Huber (2012), however, the stance regarding access to information, transparency of structures and processes, citizen empowerment, and freedom of expression is embedded in the historical context of each society.

From this perspective, the Public Governance and Transparency Index (ITGP), developed by Transparency International, aims to assess and promote practices of integrity, transparency, open data, access to information, social participation, and governance at all government levels (Transparency International Brazil, 2022). The ITGP examines the implementation of public policies, legislation, and government actions related to these issues. This includes checking the regulation and implementation of essential laws for transparency and integrity, the existence of social control platforms, and the availability of data on tenders, contracts, works, finances, and budgets.

The Public Governance and Transparency Index (ITGP), developed by Transparency International, also assesses the promotion and strengthening of citizen participation. In its most recent evaluation, Rondônia ranked 4th with a score of 85.2, indicating alignment with best practices in transparency and public governance, although a high score does not necessarily imply complete transparency or the absence of corruption (Transparency International Brazil, 2022).

In addition to the ITGP, the National Transparency Ranking, an initiative of the Federal Public Ministry's Anti-Corruption Chamber, evaluates adherence to transparency legislation in Brazilian municipalities. Based on a questionnaire that includes the main legal requirements and best practices defined by Law 12.527/2011, the ranking is prepared by the National Strategy for Combating Corruption and Money Laundering (ENCCLA) and assigns scores from 0 to 10 (MPF, 2016). In 2015, only one state and seven municipalities reached the maximum score. The average score for Brazilian municipalities was 3.92. Following the MPF's recommendations for compliance with legal obligations, a second analysis in 2016 revealed an increase in the average score to 5.15. The state of Rondônia, which initially scored 5.20, reached the maximum score of 10.0 in the second evaluation (MPF, 2016).

In the Municipal Transparency Ranking, various elements are evaluated to ensure that municipal public administrations maintain high standards of transparency. The assessment ranges from the availability of information about transparency on the internet to the presence of content search tools that facilitate access to information, especially valued in municipalities with fewer than 10,000 inhabitants (Brazil, 2011).

Additionally, details are required about the municipal revenues and expenses over the last six months, including the nature, the anticipated value, and the amount actually collected (Brazil, 2000, 2010). Expense data must specify the committed, settled, and paid values (Brazil, 2010).

Transparency also extends to bidding and contracts, demanding the publication of all tender notices, results, and complete contracts from the last six months (Brazil, 2011). Details on bidding procedures must also be published, specifying the mode, dates, values, and objects of the tenders (Brazil, 2010, 2011).

Furthermore, it is essential for municipalities to provide management reports from the previous year, including the Summary Report of Budget Execution (RREO) and the Fiscal Management Report (RGF) from the last six months, as well as a statistical report on information requests (Brazil, 2000, 2011).

The citizen information service must allow for both in-person and electronic requests, with all operational information clearly indicated on the website (Brazil, 2011). It is also important to easily follow up on requests through the e-SIC, ensuring access without the need for extensive documentation (Brazil, 2011). Therefore, transparency requires a clear disclosure of the organizational structure and the ways to contact administrative units.

Considering that the aim of administration is to meet the needs of the common good, the FIRJAN Municipal Development Index was created to analyze the socioeconomic development of each of the more than 5,000 municipalities in Brazil. The FIRJAN Municipal Development Index (IFDM), an initiative of the Federation of Industries of the State of Rio de Janeiro (FIRJAN), has been tracking the socioeconomic development of Brazilian municipalities since 2008. Using data from the Ministries of Labor, Education, and Health, the IFDM focuses on three main areas: employment and income, health, and education (FIRJAN, 2018).

The IFDM scores range from 0 to 1, and the methodology used allows for discerning whether improvements in a municipality are the result of specific policies or merely a reflection of the decline in other municipalities. According to the 2018 evaluation, based on 2016 data, 61.54% of the municipalities in Rondônia achieved scores between 0.6 and 0.8, indicating moderate development. On the other hand, 36.46% of the municipalities scored between 0.5 and 0.6, corresponding to regular development (FIRJAN, 2018).

Hypothesis Development

Agency theory is based on the concept of a contractual relationship between two or more parties with differing interests (Eisenhardt, 1989). The theory assumes that one individual (the agent) is under the control of another (the principal) and seeks to establish how these contracts can align personal interests with the objectives of the organization (Eisenhardt, 1989).

In the public sector, this theory implies that the citizen acts as a partner of the State, being the principal financier of public resources and having a significant role in guiding governmental actions. These actions must be transparent so that society can make an appropriate judgment (Slomski, 2005). In this context, the provision of information by governments is motivated by citizen action, and in analyzing the factors that influence governmental transparency, social, economic, and political variables must be considered (Jorge et al., 2011). The hypothesis formulated for this study is:

H1: Municipalities with better levels of the Municipal Management Effectiveness Index tend to achieve better performances in public transparency, especially in the executive branches of municipal administrations in the state of Rondônia.

DEVELOPMENT

This study aims to analyze the relationship between municipal development and the improvement of transparency and public governance in the state of Rondônia. In terms of approach, the research is classified as quantitative. Quantitative research is a type of investigation that addresses a human or social problem, is based on the verification of a theory, and consists of variables quantified in numbers, which are statistically analyzed, with the objective of determining whether the generalizations predicted in the theory hold true or not (Knechtel, 2014).

Data Collection

The database was obtained from the National Transparency Ranking of the Federal Public Ministry (MPF), corresponding to 2016, and the latest FIRJAN municipal development index, 2018 edition with data from 2016. The study population consisted of the 52 municipalities of the state of Rondônia evaluated in these indices. The data were organized, processed, and analyzed using Microsoft Office Excel® and Stata.

Empirical Model

To operationalize the study, the following exploratory variables were considered: urbanization (URB); FIRJAN municipal development index (IFDM); municipal management efficacy index (IEGM); demographic density (DD); a dummy variable equal to 1 (one) if the

municipality has up to 50,000 inhabitants, 0 (zero) otherwise; a dummy variable equal to 1 (one) if the municipality has between 50,000 and 100,000 inhabitants, 0 (zero) otherwise; municipal per capita GDP, human development index (HDI), and transparency.

These were collected from the database available to the collectors of each. For transparency, data were collected from the National Transparency Ranking of the Federal Public Ministry (MPF). The description of the relationship established between the variables is given by the following algebraic equation representing the logistic regression:

$$RTM = \beta_0 - \beta_1 URB + \beta_2 IFDM + \beta_3 IEGM + \beta_4 DD + \beta_5 Pop + \beta_6 Pop2 + \beta_7 PIB + \beta_8 IDH + \varepsilon_{it} \quad (1)$$

where:

RTM es el Municipal Transparency Ranking;

β_0 is the intercept.

URB is the percentage rate of urban household situation (CENSUS);

IFDM is the FIRJAN Municipal Development Index (IFDM);

IEGM is the Municipal Management Efficacy Index (IEGM);

DD is the ratio of the total number of inhabitants to the total area of the municipality;

Pop is a dummy variable for municipalities with a population of up to 50,000 inhabitants;

Pop2 is a dummy variable for municipalities with a population between 50,000 and 100,000 inhabitants;

PIB is the Gross Domestic Product (IBGE);

IDH is the Human Development Index (HDI);

ε_{it} is the regression error.

ANALYSIS OF RESULTS

Table 1 presents the descriptive statistics, namely, the mean, minimum, and maximum values of the variables across the fifty-two observations analyzed. It is observed that the average of the Municipal Transparency Ranking for the state of Rondônia is 7.06, considering that this ranking sets a scale from zero to ten points. It can be observed that the majority of the municipalities analyzed in the state of Rondônia have an average transparency score of 70%, with the highest score being 9.8 in Porto Velho, although there are municipalities with a score of zero.

Table 1

Descriptive Table

Variable	Obs.	Mean	Standard Deviation	Minimum	Maximum
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Table 1

Descriptive Table

Variable	Obs.	Mean	Standard Deviation	Minimum	Maximum
IEGM	52	53.3471	7.6403	39.75	73.60
RTM	52	7.0615	2.7973	0.00	9.80
URB	52	0.5097	0.2109	0.17	0.95
IFDM	52	0.6269	0.0671	0.51	0.77
DD	52	7.8756	6.7276	0.38	34.74
Up to 50,000 inhabitants	52	0.8654	0.3446	0.00	1.00
Pop2	52	0.1730	0.3820	0.00	1.00
PIB	52	1.9231	5.2300	0.16	37.05
IDH	52	0.6440	0.0403	0.58	0.74

Source: survey data.

The analysis of variables related to the efficacy of municipal management and transparency in the municipalities of Rondônia reveals notable variability in both aspects. The Municipal Management Efficacy Index (IEGM) varies considerably between municipalities, with the greatest standard deviation, as the minimum score was 39.75 and the maximum was 73.60, indicating a significant difference in the efficacy of municipal management. This variation suggests that while some municipalities have very effective management, others are well below average (Bovens, 2006).

As for the transparency ranking (RTM), it shows a wide dispersion among municipalities, with values ranging from zero to almost the maximum possible, reflecting significant heterogeneity in transparency practices. In other words, while some municipalities exhibit high levels of transparency, others are significantly below, which may indicate issues in control mechanisms and in the demand for clear information by citizens (Rocha, 2008).

Urbanization is generally associated with a greater demand for transparency and better governance, as suggested by Abrucio and Loureiro (2004). The degree of urbanization varies between 17% and 95%, indicating that while some municipalities are highly urbanized, others have extensive rural areas. This difference in the degree of urbanization may influence the expectations and pressure from citizens for greater transparency. The most urbanized municipalities tend to have more transparent governance, possibly due to higher demands and expectations of accountability from urban citizens, as discussed by Amaral and Pinho (2008).

The FIRJAN Municipal Development Index (IFDM), which measures aspects of economic and social development, shows less variation compared to other metrics, indicating a more uniform level of development among the municipalities. On average, the FIRJAN

Municipal Development Index (IFDM) is similar to the Human Development Index (HDI), at 0.6269 and 0.6440, respectively. The lower dispersion of the IFDM suggests a relatively uniform level of municipal development, which may be indicative of balanced management. According to Agostineto & Raupp (2010), good municipal development is linked to effective governance practices, including transparency.

The urbanization variable (URB) shows a minimum value of 17% for the smallest urbanized city and a maximum of 95% for the largest. With an average of 50.97% of urbanized households, there is a correlation between the level of urbanization and transparency. The most urbanized municipalities tend to be more transparent in their management, possibly due to higher demands and expectations of accountability from urban citizens. This can be interpreted in light of Amaral and Pinho (2008), who argue that more urbanized regions have citizens who are more demanding regarding transparency and governance.

Population density shows a high degree of variation, ranging from 0.38 to 34.74 inhabitants/km², suggesting that some municipalities are quite dense, while others are relatively dispersed (Abrucio & Loureiro, 2004; Rocha, 2008). Municipalities with higher population density tend to have higher levels of transparency, suggesting that a greater concentration of population may encourage greater vigilance and demand for clear information about public management. Since population density influences transparency, as pointed out by Mainwaring (2003), who emphasizes that denser areas may demand and facilitate greater oversight of government actions, providing an environment where it is easier to promote transparency.

Inferences based on Equation 1 indicate that the variables urbanization (URB), FIRJAN Municipal Development Index (IFDM), Municipal Management Efficacy Index (IEGM), population density (DD), and Human Development Index (HDI) are statistically significant, as shown in Table 2.

Table 2

Linear Regression Analysis for Robust Model with Non-constant Variables.

Variables	Coefficient	Standard Deviation	T	P Value
RTM	0.694304	0.380653	1.82	0.003 **
URB	7.722365	6.599755	1.17	0.012 **
IFDM	38.82193	22.54664	1.72	0.074 *
DD	-0.32918	0.192236	-1.71	0.108 *
Pop	-4.41063	4.652824	-0.95	0.809
Pop2	0.96709	1.573102	0.61	0.542
PIB	0.03849	0.242871	0.16	0.542

Table 2

Linear Regression Analysis for Robust Model with Non-constant Variables.

Variables	Coefficient	Standard Deviation	T	P Value
IDH	41.05787	29.41124	1.40	0.755
RTM	0.69430	0.380653	1.82	0.020 **

Source: Survey data.

Note:

***, **, * significant at 1%, 5%, and 10% respectively (p-value)

The variability in the Municipal Transparency Ranking (TRM), as indicated by statistically significant results, underscores the importance of transparency in the evaluation of municipal management. With a coefficient of 0.694 and a p-value of 0.003, the model suggests that incremental improvements in transparency are positively associated with management evaluation (Rocha, 2008). This finding reinforces the premise that transparency is not only an essential component of accountability but also a key indicator of administrative efficacy (Bovens, 2006), corroborating the hypothesis that municipalities with better management efficacy tend to have greater public transparency. It also suggests that an increase in the Municipal Management Efficacy Index is associated with better performance in the Transparency Ranking.

The significant coefficient for the urbanization variable (URB) with a p-value of 0.012 and a coefficient of 7.722 confirms the hypothesis that more urbanized municipalities show higher levels of transparency. This result is consistent with the research by Abrucio and Loureiro (2004), who argue that urbanization fosters greater transparency demands and better governance practices. Amaral and Pinho (2008) also contend that in more urbanized regions, citizens tend to be more demanding regarding transparency and governance, potentially leading to improvements in public management.

On the other hand, the FIRJAN Municipal Development Index (IFDM) showed a coefficient of 38.82193 with a p-value of 0.074, suggesting a positive but marginally significant relationship between municipal development and transparency. This link corroborates the claim by Agostineto & Raupp (2010) that solid municipal development is inherently linked to transparent and effective governance. It also underscores the importance of considering socioeconomic development as a factor contributing to administrative transparency.

The population density (DD), although it showed a negative coefficient (-0.32918) and a p-value of 0.108, did not reach statistical significance at conventional thresholds. This finding is intriguing and could reflect the complexities of managing municipalities with high population density, where effective oversight and transparency management may be more

challenging (Mainwaring, 2003).

Variables related to population size (Pop and Pop2) and municipal per capita GDP did not show a statistically significant association with transparency, indicating that population size and economic wealth alone may not be clear determinants of municipal transparency. Putnam, Leonardi, and Nanetti (1993) suggest that deeper social and institutional dynamics might be more decisive factors in determining transparency and government efficacy.

In summary, the results reinforce the idea that municipal management efficacy and urbanization are significant factors in determining municipal transparency. These findings are crucial for understanding how various aspects of municipal development influence accountability and public governance. In other words, the variables Municipal Management Efficacy Index (IEGM), Population Density (DD), and Human Development Index (HDI), besides being statistically significant, show a positive relationship with the Municipal Transparency Ranking, i.e., a higher Municipal Management Efficacy Index (IEGM) corresponds to a higher Transparency Ranking, and greater Population Density and Human Development lead to a higher municipal ranking in the Transparency Ranking.

Together, these results corroborate existing literature and enhance our understanding of how urbanization, municipal development, and population density influence transparency and governance efficacy. This study emphasizes the need for policies that promote transparent and effective governance, essential for strengthening the pillars of democracy and improving the quality of life in urban and rural settings.

CONCLUSIÓN

This study, focused on understanding how municipal development influences transparency and public governance in Rondônia, has confirmed that municipalities with high levels of management efficacy tend to exhibit better results in public transparency. This finding underscores the importance of considering factors such as municipal management efficacy, demographic density, and human development, which showed a significant positive relationship with the Municipal Transparency Ranking. These elements are crucial for effective and transparent governance, essential for the socioeconomic progress of municipalities.

The results affirm the central hypothesis that municipalities with better levels of municipal management efficacy tend to achieve better results in public transparency. Specifically, it was found that the Municipal Management Efficacy Index (IEGM), demographic density (DD), and the Human Development Index (HDI) have a significant positive relationship with the Municipal Transparency Ranking. This implies that municipalities that excel in management efficacy, demographic density, and human development tend to be more transparent in their operations and governance. Public

governance significantly influences the economic development of municipalities, as observed in the Metropolitan Region of Salvador (Bispo et al., 2022).

Additionally, it was noted that urbanization plays a decisive role in municipal transparency. More urbanized municipalities tend to adopt more transparent governance practices, likely due to higher demand and expectations for accountability from citizens in these environments. This aspect highlights the need to develop public policies that promote transparency and citizen participation at all levels of urbanization.

On the other hand, the results indicate that variables such as population size and municipal per capita GDP do not have a significant impact on transparency. This suggests that municipal transparency is more influenced by the quality of management and socio-demographic conditions than by direct economic wealth.

Finally, this study contributes to the academic and practical debate by emphasizing the importance of strengthening transparency and accountability in public administration. It reveals that improving management efficacy, demographic density, and human development are fundamental steps to promote transparent governmental practices. Moreover, it emphasizes the need for a deeper understanding and continuous improvement of governance and public transparency, which not only enhances the quality of public administration but also strengthens democracy, ensuring that citizens can effectively perform their role in oversight and participation in the democratic process.

This study highlights the importance of transparency and accountability in public administration, contributing both to the academic debate and to the practice of public governance. The evidence that municipal management efficacy, demographic density, and human development are key factors in promoting public transparency underscores the need for policies that strengthen these aspects, with a view to continually improving governance and accountability.

Thus, the research reinforces the idea that a deeper understanding of accountability and continuous improvement of governance and public transparency are essential. These improvements not only elevate the quality of public administration but also strengthen democracy by ensuring that citizens can effectively exercise their role in control and participation in the democratic process.

REFERENCES

- Abrucio, F. L., & Loureiro, M. R. (2004). Finanças públicas, democracia e accountability. In Elsevier (Ed.), *Economia do setor público no Brasil*.
- Agostineto, R. C., & Raupp, F. M. (2010). Prestação de contas por meio de portais eletrônicos: um estudo em câmaras municipais da grande Florianópolis. *Revista Universo Contábil*, 6(3), 64–79. <https://doi.org/10.4270/ruc.2010322>

- Agum, R., Riscado, P., & Menezes, M. (2015). Políticas públicas: conceitos e análises em revisão. *Revista Agenda Política*, 3(2), 12–42.
- Amaral, M. S., & Pinho, A. G. de. (2008). Sociedade da Informação e Democracia: Procurando a Accountability em Portais Municipais da Bahia. *Anais Do XXXII Encontro Da ANPAD*. https://arquivo.anpad.org.br/abrir_pdf.php?e=ODY1NA==
- Andrade Filho, A. C. F., & Andrade, A. D. M. (2019). Controle Social: Ferramenta Para o Exercício da Cidadania / Social Control: Tool for the Exercise of Citizenship. *ID on Line Revista de Psicologia*, 13(44), 945–961. <https://doi.org/10.14295/idonline.v13i44.1668>
- Beblavý, M., Sičáková-beblavá, E., & Bačová, B. (2022). A Conceptual Framework for Understanding and Measuring The Transparency of Public Policy. *Sociológia - Slovak Sociological Review*, 54(2), 95–120. <https://doi.org/10.31577/sociologia.2022.54.2.4>
- Birkinshaw, P. (2006). Freedom of information and openness: fundamental human rights. *Administrative Law Review*, 58(1), 177–218.
- Bispo, J. de S., Souza, G. J. De, & Ferreira, J. R. (2022). Effects of Public Governance on Economic Development of the Municipalities of the Metropolitan Region of Salvador. *International Journal for Innovation Education and Research*, 10(1), 145–162. <https://doi.org/10.31686/ijer.vol10.iss1.3600>
- Black, J., Hashimzade, N., & Myles, G. (2009). *A Dictionary of Economics* \$ *A Dictionary of Economics* (Oxford University Press, Ed.; 3ª Ed.).
- Bovens, M. (2006). Analysing and Assessing Public Accountability. A Conceptual Framework. *European Governance Papers (EUROGOV)*, C–06(01). <http://www.connex-network.org/eurogov/pdf/egp-connex-C-06-01.pdf>
- Braga, M. V. de A. (2011). A auditoria governamental como instrumento de promoção da transparência. *Jornal de Políticas Educacionais*, 5(9). <https://doi.org/10.5380/jpe.v5i9.25176>
- Brazil. (1988). *Constituição da República Federativa do Brasil*. Diário Oficial da União de 05/10/1988, pág. nº 1.
- Brazil. (1993). *Lei nº 8.666, de 21 de junho de 1993*. Diário Oficial da União de 22/06/1993, pág. nº 8269.
- Brazil. (2000). *Lei Complementar nº 101, de 4 de maio de 2000*. Diário Oficial da União de 05/05/2000, pág. nº 1.
- Brazil. (2010). Decreto nº 7.185 de 27 de maio de 2010. Dispõe sobre o padrão mínimo de qualidade do sistema integrado de administração financeira e controle, no âmbito de cada ente da Federação, nos termos do art. 48, parágrafo único, inciso III, da Lei Complementar nº 101, de 4 de maio de 2000, e dá outras providências. Diário Oficial da União de 27 de maio de 2010.

- Brazil. (2011). *Lei nº 12.527 de 18 de novembro de 2011*. Diário Oficial da União de 18/11/2011, pág. nº 1.
- Carvalho, M. T. M., Paula, J. M. P. de, & Gonçalves, P. H. (2017). Gerenciamento de obras públicas e as políticas de infraestrutura do Brasil contemporâneo. In Instituto de Pesquisa Econômica Aplicada (Ipea), A. de Á. Gomide, & A. K. Pereira (Eds.), *Governança da Política de Infraestrutura condicionantes institucionais ao investimento* (pp. 265–294).
- Ceneviva, R. (2006). Accountability: novos fatos e novos argumentos—uma revisão da literatura recente. *Anais Do Encontro de Administração Pública e Governança Da Associação Nacional de PósGraduação e Pesquisa Em Administração*, 1–17.
- CGU. Controladoria Geral da União. (2020). *Mapa Brasil Transparente*.
- Coura, J. E. L., & Carvalho, J. R. M. de. (2017). Indicadores sociais de Gestão Pública: uma análise nos maiores municípios da Paraíba. *Anais Do IV Encontro Brasileiro de Administração Pública*, v. (IV EBAP).
- Cubas, V. de O. (2010). “Accountability” e seus diferentes aspectos no controle da atividade policial no Brasil. *DILEMAS: Revista de Estudos de Conflito e Controle Social*, 3(8), 75–99.
- De Souza, T. P. (2021). ACCOUNTABILITY POLICIAL E IMPRENSA: aplicação de media training para construção de legitimidade. *Rivista Brasiliana di Scienza di Polizia*, Brasília, Brasil, v. 12, n. 6, p. 217–252, 2021. DOI: 10.31412/rbcp.v12i6.869. Disponível em: <https://periodicoshom.pf.gov.br/index.php/RBCP/article/view/869>
- Eisenhardt, K. M. (1989). Agency Theory: An Assessment and Review. *The Academy of Management Review*, 14(1), 57. <https://doi.org/10.2307/258191>
- Ferreira, A. B. de H. (1999). *Novo Aurelio Seculo Xxi - O Dicionario Da Lingua Portuguesa* (Nova Fronteira, Ed.; 3ª Ed.).
- FIRJAN. Federação das Indústrias do Rio de Janeiro. (2018). *Índice FIRJAN de Desenvolvimento Municipal (IFDM)*.
- Fonseca, C. S. M. da. (2016). Accountability Social – Um Instrumento de Participação Ativa da Sociedade na Vida Pública. *Revista de Teorias Da Democracia e Direitos Políticos*, 2(1), 192. <https://doi.org/10.26668/IndexLawJournals/2525-9660/2016.v2i1.1112>
- Guimarães, T. de A. (2000). A nova administração pública e a abordagem da competência. *Revista de Administração Pública*, 34(3), 125–140. <https://periodicos.fgv.br/rap/article/view/6284>
- Jastramskis, D. (2024). Conformity of public policy and citizens’ attitudes towards the public service media. *European Journal of Communication*. <https://doi.org/10.1177/02673231241239258>

- Jorge, S. M., Sá, P. M., Pattaro, A. F., & Lourenço, R. P. (2011). Local Government financial transparency in Portugal and Italy: a comparative exploratory study on its determinants. *Biennial CIGAR Conference, Bélgica*.
- Knechtel, M. D. R. (2014). *Metodologia da pesquisa em educação: uma abordagem teórico-prática dialogada* (InterSaberes, Ed.; 1ª Ed.).
- Maier-Rabler, U., & Huber, S. (2012). "Open": the changing relation between citizens, public administration, and political authority. *JeDEM - EJournal of EDemocracy and Open Government*, 3(2), 182–191. <https://doi.org/10.29379/jedem.v3i2.66>
- Mainwaring, S. (2003). Introduction: Democratic Accountability in Latin America. In *Democratic Accountability in Latin America* (pp. 3–33). Oxford University PressOxford. <https://doi.org/10.1093/0199256373.003.0001>
- Martins, H. F., & Marini, C. (2010). *Um guia de governança para resultados na administração pública* (Publix Editora, Ed.).
- Miguel, L. F. (2005). Impasses da accountability: dilemas e alternativas da representação política. *Revista de Sociologia e Política*, 25, 25–38. <https://doi.org/10.1590/S0104-44782005000200004>
- Mondo, B. V., Correa, E., & Dias, C. (2019). *Manual para controle social de obras públicas* (Transparência Brasil, Ed.).
- Morlino, L. (2010). Teoria da democratização, qualidade da democracia e pesquisa de opinião: Ainda em "Mesas Separadas"? In EDUSP (Ed.), *Democracia e confiança: Por que os cidadãos desconfiam das instituições públicas?* (p. 304).
- Mozzicafreddo, J. (2002). Responsibility and citizenship in public administration [A responsabilidade e a cidadania na administração pública]. *Sociologia, Problemas e Práticas*, 40, 9–22.
- MPF. Ministério Público Federal. (2016). *Ranking Nacional da Transparência*.
- Nascimento, E. R. (2014). *Gestão pública* (Saraiva, Ed.; 3. ed.).
- Nino, E. (2010). *Access to Public Information and Citizen Participation in Supreme Audit Institutions (SAI) Guide to Good Practices*.
- O'Donnell, G. (1998). Accountability horizontal e novas poliarquias. *Lua Nova: Revista de Cultura e Política*, 44, 27–54. <https://doi.org/10.1590/S0102-64451998000200003>
- OCDE. Organização para a Cooperação e Desenvolvimento Econômico. (2011). *The Call for Innovative and Open Government*. OECD. <https://doi.org/10.1787/9789264107052-en>
- Park, D. S. (2020). O que são accountability e mecanismos de controle social? *Revista de Direito Público Contemporâneo*, 1(1), 170.
- Pereira, M. da G., Silva, W. A. C., & Araújo, E. A. T. (2014). Análise da Produção Científica sobre Accountability na Área de Administração Pública. *Anais XIV Congresso USP - Controladoria e Contabilidade*.

- Pereira Neto, A. B., & Borges, T. M. (2017). Accountability e participação popular na era da informação e do conhecimento. *Anais Do IV Encontro Brasileiro de Administração Pública (IV EBAP)*.
- Pinho, J. A. G. de, & Sacramento, A. R. S. (2009). Accountability: Can we now translate it into Portuguese? [Accountability: Já podemos traduzi-la para o português?]. *Revista de Administração Pública*, 43(6), 1343–1368. <https://doi.org/10.1590/S0034-76122009000600006>
- Pires, W. L. R., Silva, F. Â. da, Benevides, D. F., & Beraldo, J. B. L. (2020). Tendências semânticas na produção científica sobre o termo gestão pública: uma análise dos anos 2014 a 2018. *Gestão Pública: conceitos e análises de práticas em Mato Grosso*. Editora Sustentável (Ed.), p. 197.
- Pereira de Paiva Ribeiro, C., & Zuccolotto, R. (2014). A face oculta do Leviatã: transparência fiscal nos municípios brasileiros e suas determinantes socioeconômicas e fiscais. *Enfoque: Reflexão Contábil*, 33(1), 37-52. <https://doi.org/10.4025/enfoque.v33i1.19619>
- Putnam, R. D., Leonardi, R., & Nanetti, R. Y. (1993). *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton University Press.
- Roberts, N. (2004). Public Deliberation in an Age of Direct Citizen Participation. *The American Review of Public Administration*, 34(4), 315–353. <https://doi.org/10.1177/0275074004269288>
- Rocha, A. C. (2008). O Processo Orçamentário Brasileiro como Instrumento de Accountability. *Anais Do Encontro de Administração Pública e Governança (ENAPG 2008)*.
- Salles, H. da M. (2014). *Gestão democrática e participativa* (Departamento de Ciências da Administração / UFSC & CAPES : UAB, Eds.; 3ª Ed.).
- Santos, C. S. dos. (2015). *Introdução à gestão pública* (Saraiva, Ed.; 2ª Ed.).
- Schommer, P. C., Rocha, A. C., Spaniol, E. L., Dahmer, J., & Sousa, A. D. de. (2015). Accountability and co-production of information and control: social observatories and their relationship with government agencies. *Revista de Administração Pública*, 49(6), 1375–1400. <https://doi.org/10.1590/0034-7612115166>
- Secchi, L. (2009). Modelos organizacionais e reformas da administração pública. *Revista de Administração Pública*, 43(2), 347–369. <https://doi.org/10.1590/S0034-76122009000200004>
- Slomski, V. (2005). *Controladoria e Governança na Gestão Pública* (Atlas, Ed.).
- Souza, C. (2022). *Políticas públicas: conceitos, tipologias e sub-áreas*.
- Transparência Internacional Brasil. (2022). *Índice de Transparência e Governança Pública 2022*. <https://indice.transparenciainternacional.org.br/>

- Zambam, N. J., Boff, S. O., & Leal, D. J. (2023). For Social Accountability in Bidding Process and Administrative Contracts. *Revista Juridica*, 4(76), 506–532.
- Zuccolotto, R., & Teixeira, M. A. C. (2017). Transparência orçamentária: razões do descompasso entre os estados brasileiros. *Organizações & Sociedade*, 24(82), 390–411. <https://doi.org/10.1590/1984-9240822>

BIBLIOGRAPHICAL ABSTRACT

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