

Article

Electoral incentives and the management of budgetary results through unpaid commitment

Ronaldo José Rêgo de Araújo ¹

Dimas Barrêto de Queiroz ²

Edilson Paulo ³

¹ Universidade Federal de Campina Grande / Unidade Acadêmica de Ciências Contábeis, Sousa / PB – Brazil

² Universidade Federal da Paraíba / Programa de Pós-Graduação em Ciências Contábeis, João Pessoa / PB – Brazil

³ Universidade Federal de Santa Catarina / Programa de Pós-Graduação em Contabilidade, Florianópolis / SC – Brazil

This research aims to analyze the effect of electoral political cycles on the management of budgetary results by observing the unpaid commitments of Brazilian local governments. The study proposes a model to estimate discretionary budgetary accruals based on unpaid commitments, addressing an empirical-theoretical gap regarding incipient quality metrics of accounting information in public administration, considering the theory of agency, legitimacy, and impression management. The theory of political cycles was adopted to justify the managers' opportunistic cyclical behavior aligned with the electoral calendar. Three hypotheses based on the literature were tested from a sample covering 62.1% of Brazilian municipalities. The results showed positive discretionary budgetary accruals in the years immediately preceding the elections and the opposite in election years (i.e., negative discretionary budgetary accruals), completing the budgetary electoral cycle. Furthermore, it is demonstrated that managers in their first term are more inclined to enter into this type of practice, motivated by the chances of being re-elected. This evidence is ratified by the absence of this practice at significant levels during the managers' second term. This research incrementally contributes to public administration research, proposing a proxy for the quality of government accounting information. It proves that earnings management, measured by discretionary budgetary accruals, has cyclical behavior aligned with the electoral calendar.

Keywords: quality of accounting information; budgetary accounting manipulations; budget results management; budget accruals; electoral political cycles.

DOI: <https://doi.org/10.1590/0034-761220220382x>

ISSN: 1982-3134 

Article received on December 04, 2022 and accepted on July 26, 2023.

[Translated version] Note: All quotes in English translated by this article's translator.

Editor-in-chief:

Alketa Peci (Fundação Getulio Vargas, Rio de Janeiro / RJ – Brazil) 

Associate editor:

Sandro Cabral (Insper Instituto de Ensino e Pesquisa, São Paulo / SP – Brazil) 

Reviewers:

Rogiene Batista dos Santos (Fundação Getulio Vargas, São Paulo / SP – Brazil) 

Mauro Macedo Campos (Universidade Estadual do Norte Fluminense Darcy Ribeiro, Campos dos Goytacazes / RJ – Brazil) 

Ricardo Rocha de Azevedo (Universidade Federal de Uberlândia, Uberlândia / MG – Brazil) 

Peer review report: the peer review report is available at this [URL](#).

Incentivos eleitorais e o gerenciamento de resultados orçamentários por meio de restos a pagar

O objetivo desta pesquisa é analisar o efeito dos ciclos políticos eleitorais sobre o gerenciamento de resultados orçamentários por meio de restos a pagar nos municípios brasileiros. Ao assinalar como lacuna empírico-teórica as incipientes métricas de qualidade da informação contábil no ambiente governamental, embasado na teoria da agência, da legitimidade e do gerenciamento de impressão, propõe-se um modelo de estimativa de *accruals* orçamentários discricionários, captados por meio do *carry-over* do tipo restos a pagar. Para isso, valemo-nos da teoria dos ciclos políticos para justificar o comportamento cíclico oportunista do gestor, em razão do calendário eleitoral. A partir de uma amostra contemplando 62,1% dos municípios brasileiros, foram testadas três hipóteses embasadas na literatura. Os resultados evidenciaram *accruals* orçamentários discricionários positivos nos anos imediatamente anteriores aos pleitos democráticos e sua reversão – *accruals* orçamentários discricionários negativos – em anos eleitorais, perfazendo o ciclo eleitoral orçamentário. Além disso, demonstra-se que os gestores em primeiro mandato estão mais inclinados a ingressar nesse tipo de prática, motivados pelas chances de sua recondução ao cargo, a despeito do sucesso no pleito, denotando que os prefeitos estão mais dispostos a adotar tais práticas durante o primeiro mandato. Essa evidência é ratificada, tendo em vista a não observância de níveis significativos dessa prática no segundo mandato. Em caráter incremental às pesquisas no setor público, esta propõe uma *proxy* de qualidade da informação contábil governamental e comprova que o gerenciamento de resultados, mensurados pelos *accruals* orçamentários discricionários, tem comportamentos cíclicos em razão do calendário eleitoral previamente estabelecido.

Palavras-chave: qualidade da informação contábil; manipulações contábeis orçamentárias; gerenciamento de resultados orçamentários; *accruals* orçamentários; ciclos políticos eleitorais.

Incentivos electorales y gestión de resultados presupuestarios a través de saldos a pagar

El objetivo de esta investigación es analizar el efecto de los ciclos políticos electorales en la gestión de los resultados presupuestarios a través de los saldos a pagar en los municipios brasileños. Al señalar como un vacío empírico-teórico las incipientes métricas de calidad de la información contable en el ámbito gubernamental, basadas en la teoría de agencia, legitimidad y gestión de impresiones, se propone un modelo de estimación de devengos presupuestarios discrecionales, capturados a través del arrastre del tipo remanentes a pagar. Para ello, utilizamos la teoría de los ciclos políticos para justificar el comportamiento cíclico oportunista del gestor, debido al calendario electoral. A partir de una muestra que cubre el 62,1% de los municipios brasileños, se probaron tres hipótesis basadas en la literatura. Los resultados mostraron devengos presupuestarios discrecionales positivos en los años inmediatamente anteriores a las elecciones democráticas y su reversión (devengos presupuestarios discrecionales negativos) en los años electorales, completando el ciclo electoral presupuestario. Asimismo, se demuestra que los gestores en su primer mandato son más proclives a incursionar en este tipo de práctica, motivados por las posibilidades de ser reelegidos en el cargo, a pesar de su éxito en las elecciones, denotando que los alcaldes están más dispuestos a adoptar este tipo de prácticas durante el primer mandato. Esta evidencia se ratifica al constatar la ausencia de niveles significativos de esta práctica en el segundo mandato. Además de la investigación en el sector público, propone una *proxy* de calidad de la información contable gubernamental y demuestra que la gestión de resultados, medida por los devengos presupuestarios discrecionales, tiene un comportamiento cíclico debido al calendario electoral previamente establecido.

Palabras clave: calidad de la información contable; manipulaciones contables presupuestarias; gestión de resultados presupuestarios; devengos presupuestarios; ciclos políticos electorales.

1. INTRODUCTION

The objective of this research is to analyze the effect of electoral political cycles on the management of budgetary results through remainders. This is because discussions about the quality of accounting information in the government context are incipient, due to the lack of good information quality metrics in the sector (Rakhman & Wijayana, 2019). Even though the quality metrics of accounting information in the business sector are consolidated in research, they cannot only be incorporated into government discussions, as governments conduct their information with a budgetary bias, as a mechanism to guarantee better control and more transparency for the society (Araújo & Paulo, 2019).

From an informational point of view, the main government information, which guides government policies, concerns the public budget, which, in essence, adopts the principle of annuality, so that the fiscal year's expenses must be supported strictly by government revenues of the same exercise (Caiden, 1982). This asymmetry, however, is latent, considering that managers have more information about their real financial condition compared to average citizens, opening spaces for managing this information, in a similar way to what happens in the business environment (Rakhman & Wijayana, 2019).

From this perspective, although the delimitation of budget allocations to a certain period in time, in obedience to the principle of annuality, is beneficial to budget balance and the sustainability of public finances, this inflection can cause collateral problems, motivated by opportunistic behaviors such as “use or lose it” (Joyce, 2008), causing commitments to budget allocations and their consequent transposition to the next year, which is what the literature classifies as carry-over. The sharp and unnecessary increase in expenses at the end of the year is one of these side effects, which can make the expense overpriced — above the market price — and inefficient — of low potential —, allowing it to be used even without demand, only for not to lose the allocation for that exercise and, as a last resort, use it in the future, at the pleasure of the manager's interest and to the detriment of the population (Liebman & Mahoney, 2013; 2017).

Regarding the use of these resources in the future, as a consequence of the carry-over, more specifically of the remainders to be paid, spaces are opened for opportunism practiced by the manager, which end up being used as budgets, parallel to subsequent budgets, carrying deficits and/or budget credits without financial ballast, unbalancing subsequent budgets, in addition to hindering the process of fiscal transparency (Aquino & Azevedo, 2017).

Still on the remaining amounts to be paid, they can be used to resize budget performance, demonstrating a false impression that management is more austere, by calculating the primary result. This favoritism is caused by the float effect, which consists of these values' cancellation in subsequent years (Silva, Cândido, & Geraldo, 2007). Besides, the remainders to be paid suffer from the manager's discretion to decide the exact moment to be executed (settled and/or paid), and can serve as a bargain for advantages with suppliers and even the Legislative power, which ends up encouraging a process of corruption (Alves, 2011; Mendes, 2009).

In both cases, there is damage to the quality of information, with a view to forcing and presenting, at the end of the year, intentional expenditures not demanded by population, or even illusorily more competent than they actually are, using, for this purpose, artifacts to the guarantee of legitimacy and impression management, which would lead to the manager continuing in the position (Gardner

& Paolillo, 1999). This practice triggers a kind of myopic interpretation by the user of accounting information, especially the average citizen, therefore admitting opportunistic managerial behavior, which this research calls budget results management.

Among the main incentives for managers to adopt opportunistic practices is the possibility of extending their mandate or that of their respective political party, permissible in some democracies, such as Brazil, where the head of the Executive can be reappointed. Thus, such admissibility becomes an incentive for the designee to manage outlined economic policies (McRae, 1977; Nordhaus, 1975) or fiscal policies (Rogoff, 1990), especially in an expansionary nature of expenses or fiscal results (Queiroz, 2015; Rose, 2006) during the electoral period, or prior to the elections (pre-election year), to the detriment of collective interests, practices that shape budgetary political cycles.

Such evidence was tested by observing the behavior of budget revenues and expenses, but no attempt was made to verify this practice using the remaining payables, which seems to be a gap in the accounting literature. Based on this, this research raises the following issue: what is the effect of political electoral cycles on the management of budgetary results through balances to be paid?

By putting forward three research hypotheses and analyzing the behavior of the data in the period from 2015 to 2020, positive discretionary budgetary accruals were evident in the years immediately preceding the democratic elections (hypothesis 1) and their reversal – negative discretionary budgetary accruals – in the election year (hypothesis 2), outlining the budget electoral cycle. Furthermore, it was discovered that managers in their first term are more inclined to enter this type of practice, motivated by the chances of being reappointed to the position, despite their success in the election (hypothesis 3). This evidence is ratified, given the non-observance of significant levels of this practice in the second term.

Such behaviors characterize the management of budget results based on outstanding amounts, which negatively qualifies the quality of accounting information, as it fails to faithfully present information relating to budget execution and the expenses actually executed in each year.

In view of the results of this research, it became clear that mayors are more willing to adopt budget results management practices, using remainders to be paid, when they are in their first term, in order to present a greater number of remainders to be paid in the year before municipal elections and execute them (settle and pay them) in the election year, in an attempt to increase their chances of winning the election, even if they are not successful.

2. THEORETICAL REFERENCES

The cyclical notion focused on in this work concerns the use of political instruments as a result of the electoral calendar, not with the purpose of obtaining a socially optimal, desired policy in favor of the community, but rather with the manager's opportunistic motivations to be re-elected or obtain some objective, such as the continuity of the political party in power (Sakurai & Gremaud, 2007; Orair, Gouvêa, & Leal, 2014).

Therefore, maximizing social well-being is not always the preponderant factor in this discussion, considering that the manager may have particular interests in maximizing his votes and remaining in power, which may override collective interests (Downs, 1957). On the other hand, this problem is boosted when the legislation allows the manager to be reappointed to the position, as he has primary,

legitimate and genuine interests in remaining in power, with a view to continuing his public policies and projects that were not sufficient or fully implemented in the first term, often limited to four or five years.

In the Brazilian case, the electoral calendar for elections is pre-established and occurs systematically every four years, simultaneously throughout the country (Constituição Federal da República Federativa do Brasil de 1988; Emenda Constitucional nº 16, de 04 de junho de 1997). Constitutional Amendment No. 16 (Emenda Constitucional nº 16, de 04 de junho de 1997) allows the governor the possibility of extending his mandate for another four years, totaling eight consecutive years.

Despite the fiscal restrictions in the election year (Lei Complementar nº 101, de 4 de maio de 2000), the possibility of reappointment linked to prior knowledge of the exact moment in which the election will take place (always in October) is the ideal scenario for the manager to adopt opportunistic practices to increase the chances of success in the subsequent election, including in the middle of an election year. Thus, the manager still has ten months to convince the electorate that he is the best and most prepared to continue the management, being able to make adjustments in his performance, adapting it to electoral preferences (Klein, 2010; Klein & Sakurai, 2015), even if, to do so, it uses opportunistic practices.

To achieve success in the electoral process, the manager needs to enter into a field of persuasion. Popular and media perception itself has observed that, in this process of convincing, the manager, for example, leaves to inaugurate works in periods close to the elections, with the aim of appearing more efficient at that moment, which may be associated with short-term memory voter deadline (Shi & Svensson, 2006), which is considered political myopia.

Practices of this nature are what characterize managerial opportunism, which corresponds to maximizing the manager's utility, and can be viewed in the most varied aspects, always to the detriment of collective interests (Paulo, 2007), after all, this is exactly what defines results management: purposeful (discretionary) interference in the information construction process, with the aim of obtaining some particular benefit (Schipper, 1989).

Such opportunistic practice differs from abuse of power, whether political or economic. To categorize a certain action by the manager-candidate for his benefit as abusive or excessive, there must be an evident probability that this action could influence the outcome of the election, presenting a direct causal relationship between the act performed and the repercussion on the outcome of the elections (Costa, 2009; Quintaneiro, Barbosa, & Oliveira, 2003). Abuse of power corresponds to situations in which the agent acts outside the limits established by law (i.e., excess of power) or when, even within such limits, he departs from the purpose established by law, explicitly or implicit, deviating.

Although these are not aspects related to fraud, illegal acts or misuse of functions, earnings management reduces the primary potential of accounting information, which consists of providing users with reliable and relevant information, making it useful in the decision-making process (Paulo, 2007), which influences the decision-making process and, in this particular case, the electorate.

The rational voter, on the other hand, makes the decision about who to vote for, not looking to the past, but to the future: whoever has the most skill and competence in meeting their interests (Drazen & Eslava, 2005). Despite this, limited rationality, defended by Simon (1957), in an electoral approach, denotes that the voter makes the voting decision based on little information, especially the most recent, permeating myopic behavior (Shi & Svensson, 2006). Furthermore, voters observe

the behavior of the manager in office to make their decision (Carreirão, 2004, 2007; Carreirão & Barbetta, 2004; Nicolau, 2007).

In the process of retrospective evaluation of management there is accounting information, as mechanisms for consolidating democracy through accountability, so that, at the same time that the manager is accountable for his actions, he is responsible for his actions (Campos, 1990; O'Donnell, 1998), signaling future directions (Przeworski, 1998). Despite this, given the informational asymmetry between voters and rulers, the competence of rulers and the signaling of this competence emerge as fundamental variables for success in the electoral campaign (Arvate & Biderman, 2005; Arvate, Avelino, & Lucinda, 2008). Thus, the public manager, according to agency theory (Jensen & Meckling, 1976), taking advantage of informational asymmetry, can seek to influence public opinion through the discretionary management of the available public budget.

Still in this process of conquering the electorate, high general pre-election expenditures, especially those that are visible to voters, can serve as a sign of the manager's competence, representing his capacity and ability to provide more public goods in the future (Rogoff, 1990; Rogoff & Sibert, 1988).

The manager can, therefore, signal his competence not only by increasing general expenses in the budget, but also by changing the composition of these expenses, in order to increase groups of expenses that are more visible to the population, such as investment expenses (Drazen & Eslava, 2005; Kneebone & McKenzie, 2001; Queiroz, 2015), and reducing others, avoiding a general increase in expenses and the deficit, thus demonstrating its ability to manage public goods and services.

In this escalation, seeking to expand the sources of financing the available budget, managers can also optimize the budget by reinforcing voluntary government transfers, using political strategies and increasing such transfers in election years (Araújo, Queiroz, Paulo, & Nobre, 2020), which would support new expenses and their power to signal competence.

As a way of boosting the power of signaling competence, the manager can adopt expense results management practices, through carry-over, in order to act within the permissibilities of Brazilian legislation, carrying budget allocations in a discretionary manner, by default of collective interests, to be used at a later time, especially in the vicinity of elections, in order to increase their competence before the electorate.

When using carry-over of the remainders to be paid type, the manager can leave the user short-sighted of his real competence. This seems to be an easily accessible path, as, in addition to distancing it from scrutiny and legislative control (Aquino & Azevedo, 2017), Brazilian tax rules also leave something to be desired in terms of use and limits.

In any of the management alternatives adopted, it is observed that, at the center of this entire issue, lies the fact that the manager has diverse interests, sometimes unrelated to social and collective ones, which transcend political, institutional, and social factors. the government's own fiscal performance (Alesina & Perotti, 1996; Poterba, 1996). Among the diverse interests is the possibility of reappointing the manager, one of the main incentives for engaging in opportunistic practices during the mandate (Nordhaus, 1975).

When the issue is staying in power, all political parties are not concerned with the effects or directions of their policies, except to the extent that they influence the decisive choices of voters' votes (Downs, 1957), which is independent of who is in power or on the political-ideological spectrum.

Based on these discussions, opportunistic behavior, when mediated in a cyclical manner and based on the electoral calendar, is treated in the literature as budgetary political cycles (Rogoff, 1990).

The *sine qua non* observation of this cycle concerns the manager, when in full exercise of his mandate, and channels encouraged efforts, mainly due to his permanence in power, his prestige and his bargaining power, even if against social and collectives (Niskanen, 1971), promoting expansionary economic policies for public spending before elections (Araújo et al., 2020; Klein & Sakurai, 2015; Queiroz, 2015; Rose, 2006), becoming apparently more competent (Klein & Sakurai, 2015; Rose, 2006) and changing the systematics of voluntary transfers (Araújo et al., 2020), which demonstrates the aptitude for a type of budget information management through real activities, whether revenue, or expenditure, or both.

Even with the fixing of the electoral calendar and current Brazilian fiscal rules prohibiting, in the last two four months of the Chief Executive's term, the manager from contracting obligations that cannot be fully fulfilled within that period, or that have installments to be paid during the next year, without there being sufficient cash available for this (Lei Complementar nº 101, de 4 de maio de 2000), the manager can boost the budget that year through the "abnormal" use of unpaid balances, in an attempt to seek legitimacy among his voters (Dowling & Pfeffer, 1975), using impression management through real activities (Spence, 1973).

Adopting managed carry-over practices such as balances to be paid, processed or not, resembles, in all aspects, the discretionary accruals of results management models in the business area, which this research considers budgetary accruals.

Despite this, one should not forget that the most conservative voter can punish the manager for his systematic increase, especially when it causes a deficit (Peltzman, 1992), which would be avoided if the manager could use budgetary and financial reserves of previous years, making use of carry-over, categorized by Brazilian legislation as remains payable and what this work is considering budget accruals. Furthermore, election years are "suspicious" for manipulating expenses (Brender & Drazen, 2005), and this maneuver is likely to be used, as it occurs, strictly speaking, without changing general expenses and without incurring a *deficit*.

With this, the most astute manager can make use of budgetary carry-overs such as remainders to be paid in the year before the elections, in an abnormal way, and in future moments, in an election year, when tax legislation establishes certain prohibitions. In light of these discussions, the following research hypothesis was raised: the pre-election year positively influences discretionary budget accruals (H1).

Furthermore, by designing the effective budget electoral cycle of acceleration and subsequent reversal, in significant amplitudes, the public manager reverses the remaining payables registered before, without going against the prohibitions established by the Fiscal Responsibility Law (Lei Complementar nº 101, de 4 de maio de 2000), using them in the election year – especially in the first ten months before the elections – to appear more competent than they actually are, increasing the chances of re-election (Klein & Sakurai, 2015; Rose, 2006). Based on these premises, the following research hypothesis was raised: the election year negatively influences discretionary budget accruals (H2).

The research that addresses electoral cycles sometimes ignores the effects of term limitations on fiscal opportunism (Klein & Sakurai, 2015) and ignores the fact that managers can adopt different

strategies, depending on the mandate they are in. Thus, not all incumbents are eligible to run for re-election, and not everyone aspires to do so. Given the limitations imposed by legislation, the manager would have more incentives to engage in these opportunistic practices in his first term, given that, in the second, he will no longer have private benefits.

In general, managers care more about their reputation if they are eligible to run for a second term (Besley & Case, 1995). Thus, evidence shows that managers adopt strategies that are more prone to manipulation when they are in their first term, with a view to the possibility of extending themselves in power (Alt, Mesquita, & Rose, 2011; Besley & Case, 1995; List & Sturm, 2006), especially because voters tend to reward managers who demonstrate competence (Alt et al., 2011). Based on this, the third hypothesis of this research was outlined: the first electoral term positively influences discretionary accruals (H3).

3. METHODOLOGICAL PROCEDURES

3.1 Sample and observation period

The sample targeted Brazilian municipalities, since sublocal governments provide greater variability and observation of the phenomenon, in addition to being more likely to reappoint the manager through direct convincing. Thus, this research has a population of 5,570 municipalities (Instituto Brasileiro de Geografia e Estatísticas [IBGE], 2021), excluding those that did not declare data relating to the remaining amounts to be paid; those who, even declaring, did so with some type of inconsistency in that year; and those who omitted to declare data relating to the other budget variables used in this study or declared them with inconsistencies. Given these considerations, the sample selection process is presented.

TABLE 1 SAMPLE SELECTION (BALANCED AND UNBALANCED)

Sample selection details	2015	2016	2017	2018	2019	2020	Total
Municipalities with declared data on balances to be paid (A)	4.052	3.930	4.273	5.235	5.229	4.264	26.983
Exclusion of municipalities with some type of problem in the declared data on balances to be paid (B)	93	119	60	84	109	118	583
Municipalities with consistent data on balances to be paid (C = A - B)	3.959	3.811	4.213	5.151	5.120	4.146	26.400
Percentage observed (D = [C/5.570] x 100)	71,1%	68,4%	75,6%	92,5%	91,9%	74,4%	79,0%
Exclusion of municipalities with problems in the data declared in other budget information (E)	697	717	1.135	1.709	1.108	277	5.643

Continue

Sample selection details	2015	2016	2017	2018	2019	2020	Total
Survey sample for the unbalanced model (F = C - E)	3.262	3.094	3.078	3.442	4.012	3.869	20.757
Percentage observed (G = [F/5.570] x 100)	58,6%	55,5%	55,3%	61,8%	72,0%	69,5%	62,1%
Exclusion of municipalities for balancing (H)	1.440	1.272	1.256	1.620	2.190	2.047	9.825
Survey sample for the balanced model (I = F - H)	1.822	1.822	1.822	1.822	1.822	1.822	10.932
Percentage observed in the balanced model (J = [I/5.570] x 100)	32,7%	32,7%	32,7%	32,7%	32,7%	32,7%	32,7%

Source: Elaborated by the authors.

The analysis period corresponded to the financial years from 2015 to 2020, which includes the moment when the Transparency Portal came to be fully and throughout the national territory, given that Complementary Law No. 131 (Lei Complementar nº 131, de 27 de maio de 2009) which established a four-year lack for adoption in all municipalities of the Federation. Thus, the 2016 election was the first election in which all municipalities should be fully with their portals in operation, allowing voters to use government information to support decision making in the democratic process.

3.2. Variables used and economical models

3.2.1. Conceptual and deductive intuition of discretionary budgetary accruals

By definition, accruals correspond to temporal differences in the recognition of revenues and expenses, impacting discrepancies from the cash regime (Martinez, 2001). Bringing the discussion to the government scope, the principle of annuality of the public budget requires that income and expenses are estimated and made within a financial year, and the government budget result may be measured as described in Equation 1:

$$RO_{it} = RA_{it} - DE_{it}$$

In it, RO_{it} corresponds to the budget result; RA_{it} , to the recipe collected; and DE_{it} , to the committed expense.

Since the revenues collected are recognized in the budget by the cash regime, there is no way to talk about revenue accruals, so that there are not many chances of managing them in this regard. However, it is assumed that the fully executed expenses can be transferred to the subsequent exercise, through remains to be paid (Lei nº 4.320, de 17 de março de 1964), characterizing a type of budgetary accruals. Based on this, government expense can be written as demonstrated in Equation 2:

$$DE_{it} = DEP_{it} + RP_{it}$$

In it, DE_{it} corresponds to the committed expense; DEP_{it} , to payments made; and RP_{it} , to the remains to pay subscribers.

In the verification of accruals, the literature divides them into discretionaries and non-discretionary, being the management of results associated with the discretion of the manager (Dechow, Ge, & Scharand, 2010; Healy, 1985; Paulo, 2007). By analogy, the remains to be paid in discretionaries and non-discretionary can be categorized, resembling discretionary and non-discretionary budgetary accruals, as written in Equation 3:

$$TOA_{it} = NOA_{it} + DOA_{it}$$

In it, TOA_{it} corresponds to the total budget accruals; NOA_{it} , to non-discretionary budgetary accruals; and DOA_{it} , to the discretionary budgetary accruals.

In spite of Law No. 4,320 (Lei nº 4.320, de 17 de março de 1964) does not prohibit the reinstall of these remains to be paid – that is, there are no legal impediments that limit that Exercise x expenses can be transported to periods $x+1, x+2... x+n$ –, this window can give rise to the practice of transporting this expense in a disorderly manner and/or under the discretion of the manager, without necessarily there is a demand for such expense, which characterizes a kind of budget management, as discussed in the theoretical framework of this research.

There are remains to pay that result from the normal flow of the government’s operations, mandatory execution, and there are discretionaries, which do not arise from the normal activities of the entity, but from some specific motivation, when their execution would not be mandatory.

The transportation of expenses for subsequent exercises ($x+n$) abnormally, which this work is calling “budgetary results”, makes a false impression on management performance in the year x over the whole or certain functions of Government, in addition to allowing expenses in the year $x+n$, without expressing budget $x+n$, the misrepresentation of accounting users, as advocated by print management theory.

Even though such values are purged in future exercises for their cancellation, the information comes late to users, falsifying the accounting and public transparency process (Aquino & Azevedo, 2017; Rakhman & Wijayana, 2019), which makes the Public Budget a mere compliance process (Rezende & Cunha, 2013). Based on this, Equation 4 presents the intuitive aspects of budgetary accruals estimates:

$$TOA_{it} = \left[\frac{RP_{it}^{t+1} - (PagRP_{it}^{t-1} + CanRP_{it}^{t-1})}{DespTot_{it}} \right]$$

In it, TOA_{it} corresponds to the total budget accruals; RP_{it} , to the remains to be paid at the end of the t Period, to be registered in the period $t+1$; $PagRP_{it}$, to pay the remains to be paid made in the period t of the government i ; $CanCRP_{it}$, to the cancellation of the remains to be paid performed in the t Period of the Government t ; and $DespTot_{it}$, to the forecast expected expense of the government i and in the period t .

Measuring results management in its entirety is the first step in identifying how discretionary of it is and how non-discretionary, being the effective management of results that impacts the quality of accounting information and whose literature discusses the aspects of measurements, incentives

and effects given the managerial opportunism. To capture it, the next section discusses and presents the model proposed by this thesis.

3.2.2. Estimator for budgetary results management

To discuss the quality of accounting information in the government sector, it is necessary to use the empirical models already consolidated by academic research in the business field. Based on this, Table 1 presents a synthesis of the variables/proxies used in the main models that capture or influence results management in the business segment and that this research analyzed and adapted to the model used in the government. The last column, in turn, points out the decision to use (DU) or not the variable in this research, being marked “yes” (S) when the decision is affirmative.

BOX 1 VARIABLES/PROXIES ASSOCIATED WITH NON-DISCRETIONARY ACCRUALS IN BUSINESS MODELS

	Variable/proxy used	Source	DU
(a)	Lagged <i>Accruals</i> ($t-1$)	Dechow et al. (2003); Pae (2005); Paulo (2007)	S
(b)	Deferred asset	Dechow et al. (2003); Jones (1991, 1995); Kang and Sivaramakrishan (1995); Pae (2005); Paulo (2007)	N/A
(c)	Permanent assets	Dechow et al. (2003); Jones (1991, 1995); Kang and Sivaramakrishan (1995); Pae (2005); Paulo (2007)	N/A
(d)	Total assets (weighting)	Healy (1985); Jones (1991, 1995)	N
(e)	Total lagged assets in $t-1$ or $t-2$ (weighting)	DeAngelo (1986); Dechow et al. (2003); Dechow and Sloan (1991); Healy (1985); Jones (1991, 1995); Kang and Sivaramakrishan (1995); Pae (2005); Paulo (2007); Peasnell, Pope, and Young (2000)	N
(f)	Accounts payable in the short term	Kang and Sivaramakrishan (1995)	S
(g)	Accounts receivable/customers	Kang and Sivaramakrishan (1995)	N
(h)	Abnormal behavior of production costs	Paulo (2007)	N/A
(i)	Abnormal behavior of operating expenses	Paulo (2007)	S
(j)	Abnormal behavior of cash flows	Paulo (2007)	N
(k)	Sales growth	Dechow et al. (2003)	N/A
(l)	Operating costs and expenses	Kang and Sivaramakrishan (1995); Paulo (2007)	N/A
(m)	Depreciation and amortization	Kang and Sivaramakrishan (1995)	N/A

Continue

	Variable/proxy used	Source	DU
(n)	Prepaid expenses	Kang and Sivaramakrishan (1995)	N/A
(o)	Stocks	Kang and Sivaramakrishan (1995)	N
(p)	Current operating cash flow	Pae (2005); Paulo (2007)	N
(q)	Operating lagged cash flow ($t-1$)	Pae (2005)	N
(r)	Net Revenue	Kang and Sivaramakrishan (1995); Paulo (2007); Peasnell et al. (2000)	S
(s)	Current accounting result	Paulo (2007)	N
(t)	Variation in net revenue	Dechow et al. (2003); Jones (1991, 1995); Pae (2005)	S
(u)	Variation in payable accounts	Peasnell et al. (2000)	S
(v)	Variation in receivable accounts	Dechow et al. (2003); Jones (1995); Peasnell et al. (2000)	N
(w)	Variation in stocks	Peasnell et al. (2000)	N
(x)	Variation in net profit	Paulo (2007)	N
(y)	Negative variation in net profit (dummy)	Paulo (2007)	N

Subtitles: DU - Decision to Use in this research; S - Yes, it is possible; N - No; N/a - does not apply/suit.

Source: Elaborated by the authors.

As shown in Box 1, the literature seeks to capture non-discretionary accruals due to the intrinsic effect of the accrual basis, detailing in the model variables that present a high degree of accounting estimates, especially those that require accounting choices in their measurement, the so-called partitioned variables. In addition to this research not adopting the accrual basis metric to estimate earnings management, some of the variables/proxies presented in Box 1 will not be considered for the following reasons:

- 1) Given the recent implementation of property standards in the government sector, there is still no consistent data available over time, which, in many cases, is in the implementation phase by various government entities or does not suit the government aspect. These variables were marked as “not applicable/appropriate” (N/A)¹.
- 2) Some variables, although presented in government information, make no sense for the discussion presented in this research or are already included in another variable, given the government budgetary aspect. These variables were identified as “no” (N).

The variables marked as “yes, it is possible” (S) will be considered and adapted to the governmental aspect in the estimation of discretionary remains to be paid in this research, which will discuss them from now on.

Accounts payable (f) in the short term corresponds to the remains payable in the government budget, or most of it. Furthermore, a variation in accounts payable (q) would effectively correspond

¹ N/A are the initial letters of “*Não se Aplica*” (in Portuguese), that means Not Applicable.

to a variation in the registration of balances payable. Public investments are, in essence, executed via remainders to be paid (Almeida, 2013; Alves, 2011; Aquino & Azevedo, 2017), being normal when, in a year, there is growth in investment expenditure and, consequently, greater enrollment in the remainders to switch off.

Rakhman and Wijayana (2019) revealed that the high proportion of capital expenditure in the public budget reduces the quality of financial reporting. Furthermore, in Paulo's model (2007), the abnormal behavior of operating expenses (i) is used to capture total accruals. Thus, increases in outstanding payments that do not arise from investments may indicate the manager's discretion to postpone payments or carry the allocation for accommodations in future budgets. Therefore, this research used the variation in capital expenditure to capture the manager's non-discretionary accruals.

Box 1 also shows that the models consider that accounting manipulation is involved in the recognition of revenues (r and t), either increasing current accruals or reversing estimates made in previous years. Although there is no such possibility at the governmental level, the registration of the remainder to be paid may depend on the availability of resources, with the difficulty in harmonizing the financial cycle being a natural path to delaying expenses (Flynn & Pessoa, 2014; Lienert & Sarraf, 2001), boosting registrations in outstanding payments. If there is greater availability of resources, the registration of remainders to be paid would be at the discretion of the manager, who would be motivated to only have greater cash availability at the end of the year (Irwin, 2012). Based on this, this article considers the variation in current revenue as another component to capture the manager's non-discretionary accruals.

In parallel to this, a precarious system of governance in the collection of local taxes, linked to an unrealistic budget, can unbalance the financial cycle and postpone the implementation of government expenses (Flynn & Pessoa, 2014), which would increase the remaining payments. From this perspective, this research took to the model the proportion of tax revenue collected in relation to the planned value and the total performance of collection as elements that justify the carry-over of expenses between years.

Otherwise, governments that have more voluminous resources are subject to more sophisticated internal control systems and greater external pressure exerted by the media and the central government, in addition to having more resources, presenting an improvement in the quality of reported financial reports (Rakhman & Wijayana, 2019), which advocates that carry-overs are not associated with the manager's discretion. From this angle, the aim is to capture the manager's normal behavior based on the number of resources committed, which would signal the possibility of non-discretionary accruals.

The models also consider the accruals lag (a) as an element that influences the trend of accruals, as well as reversals of past estimates. In relation to reversals, Equation 6 includes total accruals in the calculation itself, however the pattern of accruals from the previous year can be a good indication of current estimates, as, if different behavior is observed at this level, it would be an indication of a discretionary aspect of the manager. Based on this, the proportion of the current balances payable to the volume of the balances payable from the previous year may indicate the pattern of balances payable adopted by management, which would characterize the manager's lack of discretion, which is why this variable was also considered in the model.

In view of all the discussions presented so far, Equation 5 describes the model for estimating non-discretionary budgetary accruals that this research proposed:

$$TOA_{it} = \alpha + \beta_1 \Delta DCap_{it} + \beta_2 RecProp_{it} + \beta_3 DAR_{it} + \gamma_1 \Delta RCORR_{it} + \gamma_2 TO_{it} + \gamma_3 RPANT_{it} + \varepsilon$$

In it, TOA_{it} corresponds to the total budget accruals of municipality i in period t , obtained through Equation 4 and weighted by the total budget in period t ; $\Delta DCap_{it}$, the variation in capital expenditure of municipality i in period $t-1$ for period t , weighted by the size of the budget in period t ; $RecProp_{it}$, the performance of the collection of own resources, obtained by the proportion of tax revenue collected in relation to the planned amount of municipality i in period t ; DAR_{it} , the total collection performance in relation to the plan of municipality i in period t ; $\Delta RCOR_{it}$, the variation in the net current revenue of municipality i in period $t-1$ for period t , weighted by the size of the budget in period t ; TO_{it} , the size of the budget obtained by the natural logarithm of the total committed expenditure of municipality i in period t ; and $RPANT_{it}$, to the natural logarithm of the total balances payable (processed and unprocessed) arising from period $t-1$.

The error (ε) of the regression shown in Equation 5 is considered a proxy for earnings management, as is done with discretionary accruals in most business models, which is why such a strategy was also adopted in this investigation, that is, the regression error is the proxy for managing budget results.

3.2.3 Estimators for hypothesis tests

To achieve the second specific objective, it was necessary to estimate a new econometric model. In it, variables were inserted that capture the electoral incentives referring to Brazilian public managers, discussed in this investigation, which are the cases of dummy variables for the electoral and pre-electoral years of municipal elections.

In addition, opportunistic behavior can develop both for the manager's permanence in office and the continuity of his party in management (Klein & Sakurai, 2015). Both factors may be preponderant in determining the quality of accounting information. Based on these premises, the model sought to capture the electoral years, the manager's initial mandate, as well as his success and that of the party, establishing interactions of the electoral and pre-election years with the characteristics of the mandate, always through variables of dummies.

Upon estimates of the models presented in Equation 5, the regression error was brought to Equation 6, in a balanced and unbalanced panel, along with the variables that denote the electoral cycle for the hypothesis tests proposed in this research.

$$DOA_{it} = \beta_0 + \beta_1 E_t + \beta_2 PrE_t + \beta_3 Mand_{it} + \beta_4 [E * Mand]_{it} + \beta_5 [PrE * Mand]_{it} + \beta_6 Gest_Rec_{it} + \varepsilon$$

In it, DOA_{it} is the error of the regression provided in Equation 5 and corresponds to the discretionary budgetary accruals adopted by the municipality i in the period t ; E_p in the election year, being a dummy variable in which 1 marks the election year and 0, the others; PrE_p in the pre-election year, being a dummy variable in which 1 marks the year before the elections and 0, the others; $Mand_{it}$, to the first term manager, being a dummy variable in which 1 marks the four years of the manager's first term and 0, the others; $E*Mand_{it}$, to an interaction between the variables, capturing the manager in the first term in the position of the election year; $PrE*Mand_{it}$, to an interaction between the variables, capturing the manager in the first term in the position of the year immediately prior to the elections; and $Gest_Rec_{it}$, to the manager reappointed to office, being a dummy variable in which 1 marks the first four years of the reappointed manager and 0, the others.

4. RESULTS AND DISCUSSIONS

Table 2 presents the descriptive statistics related to the variables used to capture budget results management, as shown in Equation 5.

TABLE 2 DESCRIPTIVE STATISTICS OF BUDGET VARIABLES RELATED TO MANAGEMENT ESTIMATES OF ABNORMAL BUDGET RESULTS (EQUATION 5)

Variable	Average	Standard deviation	Minimum	Maximum
TOA	0,0010	0,0329	-0,4125	0,8376
Δ CAP	0,3623	1,7472	-1,1192	119,0550
RECPRO	8,3552	7,4452	-4,9483	98,5708
DAR	92,3597	31,5546	1,1427	2535,6271
Δ RCORR	1,3263	10,2470	0,0024	873,9992
TO	7,6565	0,4813	6,1141	10,7910
RPANT	5,6900	0,9779	0,0000	8,8729

Number of municipalities per year:

2015: 3.262 (58,56%)	Federative entities: municipal governments
2016: 3.094 (55,55%)	Coverage: All Brazil's regions and states
2017: 3.078 (55,26%)	Analysis period: fiscal years 2015 to 2020
2018: 3.442 (61,80%)	Total number of observations: 20.757
2019: 4.012 (72,03%)	Percentage observed: 62,11%
2020: 3.869 (69,46%)	

Notes: TOA corresponds to the total budget accruals of the Municipality i in the period t , obtained through Equation 6; Δ CAP, to the variation of the capital expense of the municipality i in the period $t-1$ for the period t , considered by the budget size of the period t ; RECPRO, apply of tax revenue route in planned to the planned municipality i in the period t ; DAR, to total collection performance in relation to the plan of municipality i in period t ; Δ RCORR, the variation in current revenue of municipality i in period $t-1$ for period t , weighted by the size of the budget in period t ; TO, the size of the budget obtained by the natural logarithm of the total committed expenditure of municipality i in period t ; and RPANT, to the natural logarithm of the total remaining payable arising from period $t-1$.

Source: Elaborated by the authors.

In compliance with the average, it is possible to identify that the municipalities in the sample presented a positive level of total accruals (*TOA*, 0.0010), which alludes to the fact that there is a portion of budgetary expenses that managers carry or accumulate for at least more than one year, which is added to the limits of the allocations in the Annual Budget Law of the subsequent year(s), as a way of using them under the manager’s discretion, amplifying subsequent budgets, a hypothesis defended in this work.

During the period analyzed, the municipalities presented increasing variations regarding the execution of capital expenditure (Δ *CAP*, 0.3623) and current revenues (Δ *CORR*, 1.3263), as well as a collection performance (*DAR*) close to planned (*DAR*, 92.3597), characteristics that are consistent with the budget execution of federative entities. The other variables — own revenues (*RECPRO*), size of the budget (*TO*) and previous remaining payables (*RPANT*) — were weighted in some way, representing the magnitude of each of them for their respective budget.

It is observed that the carryover of previous outstanding balances (*RPANT*), that is, accumulated for more than one financial year, has considerable weight (5.6900), compared to the weights of the budget size (7.6565) and of own revenues (8.3552), keeping the appropriate proportions, which demonstrates the significant representation of the remainder to be paid for the municipalities in the sample.

Table 3 shows the Pearson (horizontal) and Spearman (vertical) correlation matrices with the bivariate correlations between the budget variables used in the research.

TABLE 3 CORRELATIONS BETWEEN BUDGET VARIABLES RELATED TO MANAGEMENT ESTIMATES OF ABNORMAL BUDGET RESULTS (EQUATION 5)

Variable	TOA	Δ CAP	RECPRO	DAR	Δ CORR	TO	RPANT
TOA		0.1764***	-0.0636***	-0.0747***	0.0109	0.0207**	-0.1290***
Δ CAP	0.1079***		0.0119*	0.1080***	0.2550***	0.0192***	-0.0713***
RECPRO	-0.0197***	-0.0269***		0.2492***	0.0420***	0.6517***	0.2341***
DAR	-0.0132*	0.0245***	0.0698***		0.2547***	0.1204***	-0.0911***
Δ CORR	-0.0053	-0.0550***	-0.1338***	-0.0908***		0.0586*	-0.0181***
TO	-0.0109	0.0388***	-0.0162**	0.0041	0.0020		-0.0181***
RPANT	0.0152**	-0.0384***	0.6981***	0.0487***	-0.0192***	-0.0122	

Notes: Asterisks indicate levels of statistical significance, being: *p < 0.10, **p < 0.05 and ***p < 0.001. Regarding the arrangement of correlations: horizontally, Pearson; upright, Spearman. Regarding the variables: *TOA* corresponds to the total budget accruals of municipality *i* in period *t*, obtained by Equation 6 and weighted by the total budget in period *t*; Δ *CAP*, the variation in capital expenditure of municipality *i* in period *t*-1 to period *t*, weighted by the size of the budget in period *t*; *RECPRO*, to the proportion of tax revenue collected in relation to the planned amount of municipality *i* in period *t*; *DAR*, the total collection performance in relation to the plan of municipality *i* in period *t*; Δ *CORR*, the variation in current revenue of municipality *i* in period *t*-1 for period *t*, weighted by the size of the budget in period *t*; *TO*, the size of the budget obtained by the natural logarithm of the total committed expenditure of municipality *i* in period *t*; and *RPANT*, to the natural logarithm of the total remaining payable arising from period *t*-1.

Source: Elaborated by the authors.

In Table 3, it is possible to observe that the total budget accruals (*TOA*) present positive and statistically significant correlations (Spearman) with two variables — there is variation in capital expenditures ($\Delta DCap$, 0.1764) and in the size of the budget (*TO*, 0.0207). Such relationships refer to the fact that the manager, faced with a larger budgetary contribution (*TO*), is more likely to increase budgetary transfers, carrying over a higher level of balances to be paid to the next period, something usual, according to Rakhman and Wijayana (2019).

At the same time, positive variations in capital expenditure ($\Delta DCap$) also condition the manager to this practice of carrying expenses between years, leaving them to be used effectively in a future period, which also correlates with the discussions by Rakhman and Wijayana (2019). Besides, Paulo (2007) highlights that estimates of operating expenses seem to diagnose the manager's abnormal behavior, which suggests that investment expenses correlate with the manager's normal behavior.

On the other hand, other variables demonstrate a negative correlation with *TOA*: the performance of the collection of own resources (*RecProp*, -0.0636), the general performance of the collection (*DAR*, -0.0747) and the volume of outstanding amounts to be paid previous (*RPANT*, -0.1290). In view of this, it can be stated that, when the manager obtains greater financial resources, he reduces the level of budgetary allocation, considering that the availability of financial support means that expenditure permeates all stages of public expenditure within the same fiscal year, without the need to register expenses in outstanding payments. This inference refers to the harmonization of the financial cycle with the stages of expenses, since, if there is difficulty in this harmonization, it leads to a delay in expenses and, therefore, to greater accruals (Flynn & Pessoa, 2014; Lienert & Sarraf, 2001).

Likewise, the stock of outstanding payments from previous years seems to inhibit the manager from encouraging new registrations, and, from the opposite perspective, low levels of outstanding payments may make the manager more comfortable enrolling them in greater quantity. According to Dechow et al. (2003), Pae (2005) and Paulo (2007), the usual behavior of current estimates may be linked to past estimates, maintaining a certain level of estimates.

All these findings are in line with the theoretical and empirical assumptions of public budget management and refer to the manager's lack of discretion, that is, the manager's reactions to normal budget execution behaviors, which is why such variables were selected for this research and, therefore, can be taken to the estimation model of discretionary budgetary accruals.

The literature points out that the manager's discretion in adopting results management strategies is closely linked to his or his party's possibilities of continuing to lead management, which makes him monitor the electoral election and develop behaviors to optimize and maximize the process of convincing the electorate, making it more efficient in management and deserving a vote of confidence in continuity through discretionary budget management. For this reason, the manager converges on a behavioral process of the political electoral cycle, adopting different practices in electoral and pre-electoral years.

To capture this discretionary behavior, it is necessary to observe whether the manager adopts any level of abnormal budgetary accruals and, if so, whether this is perceived in a cyclical manner due to the electoral calendar. For this, as defined in the methodological strategy, the variance of the residuals (ϵ) obtained by Equation 5 was used and Equation 6 was taken as the dependent variable. The results of these estimates are presented in Table 4.

TABLE 4 ESTIMATES RESULTING FROM THE ECONOMETRIC MODEL PROPOSED FOR INCENTIVES FOR MANAGING DISCRETIONARY BUDGETARY RESULTS IN MUNICIPAL GOVERNMENTS (EQUATION 6)

Panel A: DOA				
Unbalanced panel – 20.757 observations				
Variable	Eq. 6 (a)	Eq. 6 (b)	Eq. 6 (c)	Eq. 6 (d)
E	-0.0002022***			-0.0001878**
PrE	0.0012762***			0.0012908***
Mand				0.0004314***
E * Mand			-0.0001677**	
PrE * Mand			0.0014805***	
Gest_Rec				0.0001033
Constant	0.0008487***	0.0008659***	0.0008519***	0.0004614***
Test F:	0.0000	0.0000	0.0000	0.0000
R ² :	0.0143	0.0006	0.0151	0.0149
VIF:	1.37	1.00	1.17	1.23
Breusch-Pagan:	0.0000	0.0000	0.0000	0.0000
Panel B: DOA				
Balanced panel – 10.932 observations				
Variable	Eq. 06 (a)	Eq. 06 (b)	Eq. 06 (c)	Eq. 06 (d)
E	-0.0000831			-0.0000587
PrE	0.002826 ***			0.0028504***
Mand		0.0003803**		0.0002723
E * Mand			-0.0002895*	
PrE * Mand			0.0028095***	
Gest_Rec				0.0003603***
Constant	-0.0003723***	0.0009822***	0.0006195***	0.0000449
Test F:	0.0000	0.0000	0.0000	0.0000
R ² :	0.0393	0.0002	0.0358	0.0403
VIF:	1.33	1.00	1.15	1.22
Breusch-Pagan:	0.0000	0.0000	0.0000	0.0000

Notes: Asterisks indicate levels of statistical significance, as follows: *p < 0.10; **p < 0.05 and ***p < 0.001. Regarding the variables: E corresponds to the election year; PrE, to the pre-election year; Mand, the period in which the manager is in his first term, regardless of whether he is reappointed or not; E*Mand is an interaction between the variables, capturing exactly the manager in the first term in the election year; PrE*Mand is an interaction between the variables, capturing exactly the manager in first term in the pre-election year; Gest_Rec corresponds to the initial period of the mandate when the manager was reappointed in the subsequent election.

Source: Elaborated by the authors.

With the presented results, it appears that the proxy variable for the management of budgetary results, the DOA, presents positive directionality in pre-election years (*PrE*), which denotes the manager's practice of maximizing the budget of the year prior to the election, but not fully execute it, carrying a significant portion of the allocations committed to the election year. In other words, the manager manipulates the pre-election year budget more heavily, in order to transfer part of the budget, as remains to be paid, to an opportune moment – strictly speaking, the election year – in order to execute much more resources in your favor close to the elections, improving your image by appearing to be more efficient in the role.

This happens because the average voter has a recent memory and will decide to vote according to the behavior that the manager presents closest to the election (Shi & Svensson, 2006), as well as the ability to respond to the needs of the community, adopting a retrospective vote. through observation of the manager's behavior.

The first observed behavior of accelerating accruals in the pre-election year, is consistent with the defense supported in this work that the manager seeks not to increase his expenses on the eve of the election (Peltzman, 1992) nor operate in *deficit* (Brender, 2003; Brender & Drazen, 2005). On the contrary, to keep its image high as elections approach, it accumulates budget allocations from previous years to use in the election year. This attitude outlines the first axis consistent with an abnormal and cyclical behavior recommended by Rogoff's (1990) theory of electoral political cycles. Based on these findings, the first research hypothesis is accepted, which argues that the pre-election year positively influences discretionary budget accruals.

Combined with the evidence discussed in the previous paragraphs, DOA presents a negative relationship with election years (*E*), which represents the moment in which the manager reverses these accruals made before, executing them in an election year. The appropriations brought from the previous years, through the remains to be paid, seek the self-benefit of the gesture, by appearing more competent and efficient in management and obtaining the vote of confidence from the voter (Klein, 2010; Klein & Sakurai, 2015; Rose, 2006), increasing their chances in the election, given the political myopia of the average voter (Shi & Svensson, 2006).

This action by the manager even circumvents the Fiscal Responsibility Law (Lei Complementar nº 101, de 4 de maio de 2000) itself, with a view to not establishing prohibitions on transfers for the election year. This second abnormal behavior closes the axis of the cycle recommended by Rogoff's (1990) theory of electoral political cycles. Based on this, the second hypothesis of this investigation is validated, which advocates that the election year negatively influences discretionary budget accruals.

Regarding the characteristics of the manager or management, if the manager is in his first term (*Mand*), if he is successful in the subsequent electoral election (*Gest_Rec*), the results showed conclusive significance (*Mand*, 0.0004094, unbalanced; 0.0003803, balanced – Eq. 09(d)).

For the manager's success, the results were inconclusive. Thus, the results demonstrate that the manager in his first term, regardless of individual success in the election, tends to exhibit opportunistic behavior, increasing the level of budgetary accruals, carrying larger budgetary allocations in remainders to be paid from one financial year to another, which harms the quality of accounting information.

These results correlate with the perspectives identified by Alt et al. (2011), Besley and Case (1995) and List and Sturm (2006), that managers adopt strategies more inclined to managerial opportunism when they are in their first term.

Based on this evidence, the third hypothesis is confirmed, that the first electoral term positively influences discretionary budget accruals. When observing the manager's behavior in the electoral and pre-election years, in the first term, the results show a positive discretion in the pre-election year (0.0014805, unbalanced; 0.0028095, balanced) and negative in the election year (-0.0001677, unbalanced; -0.0002895, balanced), which demonstrates that being in the first term is preponderant for the manager's behavior.

In the election year, the manager in the first term manages his budget more, reversing previous accruals, compared to all other years, including the election year of the second term. These results match the assumptions presented by Alt et al. (2011), Besley and Case (1995) and List and Sturm (2006), reinforcing the acceptance of the third hypothesis, that public managers are more willing to adopt budget results management practices when they are in their first term.

5. FINAL CONSIDERATIONS

This research found that the public manager presents opportunistic behavior, guided by the election calendar, in order to present a positive carry-over of discretionary budgetary accruals in the pre-election year and reverse it in the election year, with a view to promoting itself more competently. It was confirmed that this behavior has particular motivations, as he is more inclined to adopt opportunistic budget results management practices when there is a chance of being reappointed.

It is possible to observe that the reflections brought forward are presented incrementally to research in the public sector in two aspects: by proposing a proxy for the quality of government accounting information, building an estimation model for managing budgetary results, which consists of an existing gap, and by proving that the management of results, measured by discretionary budgetary accruals, captured through balances payable, has a cyclical behavior around the electoral calendar.

Result management studies are important for accounting literature because they show aspects related to the quality of accounting information, which can influence the user's decision making – in this case the voter – to circumvent the effective application and interpretation of the rules posted by legislation – in this case, the Governmental – and the mandatory process of the mandatory's accountability at the head of public management, in the ruling-role relationship of control or ruler-society, even though the ruler's acts are not fraudulent, illicit or abuse of power.

Therefore, it is expected that the results presented here can provide and reflect on accounting rules in the government – in the Brazilian case, the courts of accounts – in order to improve the quality of information released in the accounting reports-Government finance, or establishing rules inhibiting opportunistic behaviors, specifically related to the discretionary use of remains to be paid not only in the election year, but since the pre-election year.

As an alternative, in the legislative level, the real benefits of the admissibility of reelection of the Chief Executive can be discussed, since, by acting with particular interests aiming at the subsequent claim, he misrepresents the conception of government management itself, by contradicting social interests and collective ones, and such discussions should serve to reformulations of the related legal provisions.

It is believed that the great beneficiaries of this investigation are the citizens in general, who, when they can verify the level of management of the manager, will have more aptitude for the judgment of

the manager's performance, making better decisions about the permanence or not of the mandataries against the public finances of their locality.

This work presents a robust budgetary results management model and can serve as a stimulus and parameter for the development of new research that discusses the quality of accounting information in governments and the factors capable of influencing this quality of accounting information.

Despite the sample was significant (62.1% for the unbalanced panel and 32.7% for the balanced) and covers, almost stratified, all states of Brazil, results and inferences are restricted to the sample and to the period analyzed: the last two municipal elections. As a limitation of the method, this research discusses aspects related to the density of political parties, which may influence the performance of the candidate manager.

New researches may seek to identify other incentives to manage the public budget and other factors associated with the manager's opportunistic behavior, such as fiscal responsibility, manager profile, financial dependence, government financial condition, municipality size or partisan political spectrum.

REFERENCES

- Alesina, A., & Perotti, R. (1996). Fiscal discipline & the budget process. *American Economic Review*, 86(2), 401-407. Retrieved from <https://www.jstor.org/stable/2118160>
- Alt, J. B., Mesquita, E., & Rose, S. (2011). Disentangling accountability and competence in elections: evidence from U.S. term limits. *The Journal of Politics*, 73(1), 171-186. Retrieved from <https://doi.org/10.1017/s0022381610000940>
- Alves, D. P. (2011). Carry-over: a flexibilização do princípio da anualidade orçamentária como indutora da qualidade do gasto público e da transparência fiscal. In *Coletânea de Monografias do 17º Prêmio Tesouro Nacional*, Brasília, DF. Retrieved from <https://premios.tesouro.gov.br/stn2011>
- Aquino, A. C. B., & Azevedo, R. R. (2017). Restos a pagar e a perda da credibilidade orçamentária. *Revista de Administração Pública*, 51(4), 580-595. Retrieved from <https://doi.org/10.1590/0034-7612163584>
- Araújo, R. J. R., & Paulo, E. (2019). Determinantes da qualidade da informação contábil em governos municipais brasileiros. In *Anais do 13º Congresso da Associação de Programas de Pós-Graduação em Ciências Contábeis*, São Paulo, SP. Retrieved from https://anpcont.org.br/pdf/2019_CPT201.pdf
- Araújo, R. J. R., Queiroz, D. B., Paulo, E., & Nobre, C. J. F. (2020). A relação da natureza das transferências governamentais e a responsabilidade fiscal dos governos municipais brasileiros. *Revista Contabilidade, Gestão e Governança*, 23(1), 124-140. Retrieved from <https://revistacgg.org/index.php/contabil/article/view/2107>
- Arvate, P. R., & Biderman, C. (2005). *Economia do setor público do Brasil*. Rio de Janeiro, RJ: Elsevier.
- Arvate, P. R., Avelino, G., & Lucinda, C. R. (2008). Existe influência da ideologia sobre o resultado fiscal dos governos estaduais brasileiros? *Estudos Econômicos*, 38(4), 789-814. Retrieved from <https://doi.org/10.1590/S0101-41612008000400004>
- Besley, T., & Case, A. (1995). Does electoral accountability affect economic policy choices? Evidence from gubernatorial term limits. *The Quarterly Journal of Economics*, 110(3), 769-798. Retrieved from <https://doi.org/10.2307/2946699>
- Brender, A., & Drazen, A. (2005). Political budget cycles in new versus established democracies. *Journal of Monetary Economics*, 52(7), 1271-1295. Retrieved from <https://doi.org/10.1016/j.jmoneco.2005.04.004>
- Caiden, N. (1982). The myth of the annual budget. *Public Administration Review*, 42(6), 516-523. Retrieved from <https://doi.org/10.2307/976121>
- Carreirão, Y. (2004). A eleição presidencial de 2002: uma análise preliminar do processo e dos resultados eleitorais. *Revista de Sociologia e Política*, 22, 179-194. Retrieved from <https://doi.org/10.1590/S0104-44782004000100013>
- Carreirão, Y. (2007). Relevant Factors for the voting decision in the 2002 presidential election: an analysis of the Eseb (Brazilian Electoral Study) data. *Brazilian Political Science Review*, 1(1), 70-101. Retrieved from http://socialsciences.scielo.org/pdf/s_bpsr/v1nse/scs_a05.pdf
- Carreirão, Y., & Barbeta, P. (2004). A eleição presidencial de 2002: a decisão do voto na região da Grande São Paulo. *Revista Brasileira de Ciências Sociais*, 19(56), 75-93. Retrieved from <https://doi.org/10.1590/S0102-69092004000300006>
- Constituição Federal da República Federativa do Brasil de 1988*. (1988). Brasília, DF. Retrieved from https://www.planalto.gov.br/ccivil_03/constituicao/constituicao.htm
- Costa, A. S. (2009). *Direito eleitoral* (8a ed.). Rio de Janeiro, RJ: Lumen Juris.
- Dechow, P. M., Ge, W., & Schrand, C. M. (2010). Understanding earnings quality: a review of proxies, their determinants and consequences. *Journal of Accounting and Economics*, 50(2-3), 344-401. Retrieved from <https://doi.org/10.1016/j.jacceco.2010.09.001>
- Dowling, J., & Pfeffer, J. (1975). Organisational legitimacy: social values and organisational behavior. *Pacific Sociological Review*, 18(1), 122-136. Retrieved from <https://doi.org/10.2307/1388226>
- Downs, A. (1957). An economic theory of political action in a democracy. *The Journal of Political Economy*, 65(2), 135-150. Retrieved from <https://doi.org/10.1086/257897>
- Drazen, A., & Eslava, M. (2005). *Electoral manipulation via expenditure composition: theory*

- and evidence* (NBER Working Paper, 11085). Cambridge, MA: National Bureau of Economic Research. Retrieved from <https://doi/10.3386/w11085>
- D'Azevedo, L. C., & Campos, M. M. (2019). Abuso de poder nas eleições municipais: uma análise das decisões dos tribunais regionais eleitorais. *Brazilian Journal of Empirical Legal Studies*, 6(2), 35-57. Retrieved from <https://reedrevista.org/reed/article/view/308>
- Emenda Constitucional nº 16, de 04 de junho de 1997*. (1997). Dá nova redação ao § 5º do art. 14, ao caput do art. 28, ao inciso II do art. 29, ao caput do art. 77 e ao art. 82 da Constituição Federal. Brasília, DF. Retrieved from https://www.planalto.gov.br/ccivil_03/constituicao/emendas/emc/emc16.htm
- Flynn S., & Pessoa, M. (2014). *Prevention and management of government expenditure arrears*. Washington, DC: International Monetary Fund. Retrieved from <https://www.imf.org/external/pubs/ft/tnm/2014/tnm1403.pdf>
- Gardner, W. L., & Paolillo, J. G. P. (1999). A taxonomy of organizational impression management tactics. *Advances in Competitiveness Research*, 7(1), 108-130.
- Healy, P. M., & Wahlen, J. M. (1999). A review of the earnings management literature and its implications for standard setting. *Accounting Horizons*, 13(4), 365-383. Retrieved from <https://doi.org/10.2308/acch.1999.13.4.365>
- Irwin, T. C. (2012). *Accounting devices and fiscal illusions* (IMF Staff Discussion Note 12/02). Washington, DC: International Monetary Fund. Retrieved from <https://www.imf.org/external/pubs/ft/sdn/2012/sdn1202.pdf>
- Instituto Brasileiro de Geografia e Estatísticas. (2021). *Municípios brasileiros*. Brasília, DF: Autor.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360. Retrieved from [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- Joyce, P. G. (2008). Does more (or even better) information lead to better budgeting? A new perspective. *Journal of Policy Analysis and Management*, 27(4), 945-975. Retrieved from <https://doi.org/10.1002/pam.20389>
- Klein, F. A. (2010). Reelection incentives and political budget cycle: evidence from Brazil. *Revista de Administração Pública*, 44(2), 283-337. Retrieved from <https://doi.org/10.1590/S0034-76122010000200006>
- Klein, F. A., & Sakurai, S. N. (2015). Term limits and political budget cycles at the local level: evidence from a young democracy. *European Journal of Political Economy*, 37, 21-36. Retrieved from <https://doi.org/10.1016/j.ejpoleco.2014.10.008>
- Kneebone, R. D., & McKenzie, K. (2001). Electoral and partisan cycles in fiscal policy: an examination of Canadian provinces. *International Tax and Public Finance*, 8(5-6), 753-774. Retrieved from <https://doi.org/10.1023/A:1012895211073>
- Lei nº 4.320, de 17 de março de 1964*. (1964). Estatui normas gerais de direito financeiro para elaboração e controle dos orçamentos e balanços da União, dos estados, dos municípios e do Distrito Federal. Brasília, DF. Retrieved from https://www.planalto.gov.br/ccivil_03/leis/l4320.htm
- Lei Complementar nº 101, de 4 de maio de 2000*. (2000). Estabelece normas de finanças públicas voltadas para a responsabilidade na gestão fiscal e dá outras providências. Brasília, DF. Retrieved from https://www.planalto.gov.br/ccivil_03/leis/lcp/lcp101.htm
- Lei Complementar nº 131, de 27 de maio de 2009*. (2009). Acrescenta dispositivos à Lei Complementar nº 101, de 4 de maio de 2000, que estabelece normas de finanças públicas voltadas para a responsabilidade na gestão fiscal e dá outras providências, a fim de determinar a disponibilização, em tempo real, de informações pormenorizadas sobre a execução orçamentária e financeira da União, dos Estados, do Distrito Federal e dos Municípios. Brasília, DF. Retrieved from https://www.planalto.gov.br/ccivil_03/leis/lcp/lcp131.htm
- Liebman, J. B., & Mahoney, N. (2017). Do expiring budgets lead to wasteful yearend spending? Evidence from federal procurement. *American Economic Review*, 107(11), 3510-3549. Retrieved from <https://doi.org/10.1257/aer.20131296>
- Lienert, I., & Sarraf, F. (2001). *Systemic weaknesses of budget management in anglophone Africa* (IMF Working Paper 01/211). Washington, DC: International Monetary Fund. Retrieved from

- <https://www.imf.org/external/pubs/ft/wp/2001/wp01211.pdf>
- List, J. A., & Sturm, D. M. (2006). How elections matter: theory and evidence from environmental policy. *The Quarterly Journal of Economics*, 121(4), 1249-1281. Retrieved from <https://www.jstor.org/stable/25098826>
- Martinez, A. L. (2001). *Gerenciamento de resultados contábeis: estudo empírico das companhias abertas brasileiras* (Doctoral Dissertation). Universidade de São Paulo, São Paulo, SP. Retrieved from <https://doi.org/10.11606/T.12.2002.tde-14052002-110538>
- McRae, D. (1977). A political model of the business cycle. *Journal of Political Economy*, 85(2), 239-263. Retrieved from <https://www.jstor.org/stable/1830790>
- Mendes, M. J. (2009). Sistema orçamentário brasileiro: planejamento, equilíbrio fiscal e qualidade do gasto público. *Cadernos de Finanças Públicas*, 9, 57-102. Retrieved from <http://repositorio.enap.gov.br/handle/1/3858>
- Nicolau, J. (2007). An analysis of the 2002 presidential elections using logistic regression. *Brazilian Political Science Review*, 1(1), 125-135. Retrieved from <https://doi.org/10.1590/1981-3826200700010006>
- Nordhaus, W. D. (1975). The political business cycle. *Review of Economic Studies*, 42(2), 169-190. Retrieved from <https://doi.org/10.2307/2296528>
- Orair, R. O., Gouvêa, R. R., & Leal, E. (2014). *Ciclos políticos eleitorais e investimentos das administrações públicas no Brasil*. Brasília, DF: Ipea.
- Paulo, E. (2007). *Manipulação das informações contábeis: uma análise teórica e empírica sobre os modelos operacionais de detecção de gerenciamento de resultados* (Doctoral Dissertation). Universidade de São Paulo, São Paulo, SP. Retrieved from <https://doi.org/10.11606/T.12.2007.tde-28012008-113439>
- Peasnell, K. V., Pope, P. F., & Young, S. (2000). Detecting earnings management using cross-sectional abnormal accruals models. *Accounting and Business Research*, 30(4), 313-326. Retrieved from <https://doi.org/10.1080/00014788.2000.9728949>
- Peltzman, S. (2003). Voters as fiscal conservatives. *The Quarterly Journal of Economics*, 107(2), 327-261. Retrieved from <https://doi.org/10.2307/2118475>
- Poterba, J. M. (1996). Budget institutions and fiscal policy in the U.S. States. *The American Economic Review*, 86(2), 395-400. Retrieved from <https://www.jstor.org/stable/2118159>
- Queiroz, D. B. (2015). *Composição dos gastos públicos e resultados eleitorais: um estudo nos municípios brasileiros* (Doctoral Dissertation) Universidade Federal do Rio Grande do Norte, Natal, RN. Retrieved from <http://dx.doi.org/10.26512/2015.11.T.19215>
- Quintaneiro, T., Barbosa, M. L. O., & Oliveira, M. G. M. (2003). *Um toque de clássicos: Marx, Durkheim e Weber* (2a ed.). Belo Horizonte, MG: Editora UFMG.
- Rakhman, F.; & Wijayana, S. (2019). Determinants of financial reporting quality in the public sector: evidence from Indonesia. *The International Journal of Accounting*, 54(3), 1950009. Retrieved from <https://doi.org/10.1142/S1094406019500094>
- Rogoff, K. (1990). Equilibrium political budget cycles. *The American Economic Review*, 80(1), 21-36. Retrieved from <https://www.jstor.org/stable/2006731>
- Rogoff, K., & Sibert, A. (1988). Elections and macroeconomic policy cycles. *Review of Economic Studies*, 55(1), 1-16. Retrieved from <https://doi.org/10.2307/2297526>
- Rose, S. (2006). Do fiscal rules dampen the political business cycle? *Public Choice*, 128(3-4), 407-431. Retrieved from <https://doi.org/10.1007/s11127-005-9007-7>
- Sakurai, S. N., & Gremaud, A. P. (2007). Political business cycles: evidências empíricas para os municípios paulistas (1989-2001). *Estudos Econômicos*, 11(1), 27-54. Retrieved from <https://doi.org/10.1590/S1413-80502007000100002>
- Schipper, K. (1989). Commentary on earnings management. *Accounting Horizons*, 3(4), 91-102.
- Shi, M., & Svensson, J. (2006). Political budget cycles: do they differ across countries and why? *Journal of Public Economics*, 90(8-9), 1367-1389. Retrieved from <https://doi.org/10.1016/j.jpubeco.2005.09.009>
- Silva, A. M. A., Cândido, J. O., Jr., & Geraldo, J. C. (2007). *Restos a pagar: implicações sobre a sustentabilidade fiscal e a qualidade do gasto público*. Brasília, DF: Secretaria de Orçamento Federal.
- Simon, H. A. (1957). *Models of man: social and rational*. New York, NY: John Wiley.
- Spence, M. (1973). Job market signaling. *The Quarterly Journal of Economics*, 87(3), 355-374. Retrieved from <https://doi.org/10.2307/1882010>

Ronaldo José Rêgo de Araújo

<http://orcid.org/0000-0001-8335-4418>

Ph.D. in Accounting Sciences at the Federal University of Paraíba (UFPB); Adjunct Professor at the Federal University of Campina Grande (UFCG). E-mail: ronaldocontabilidade@ymail.com

Dimas Barrêto de Queiroz

<http://orcid.org/0000-0002-8511-3420>

Ph.D. in Accounting Sciences at the University of Brasília (UnB); Associate Professor at the Federal University of Paraíba (UFPB). E-mail: dimasqueiroz@gmail.com

Edilson Paulo

<http://orcid.org/0000-0003-4856-9039>

Ph.D. in Accounting Sciences at the University of São Paulo (USP); Associate Professor at the Federal University of Santa Catarina (UFSC). E-mail: e.paulo@ufsc.br

AUTHORS' CONTRIBUTION

Ronaldo José Rêgo de Araújo: Conceptualization (Supporting); Data curation (Lead); Formal Analysis (Lead); Investigation (Supporting); Methodology (Supporting); Software (Supporting); Supervision (Supporting); Validation (Lead); Writing - original draft (Supporting); Writing - review & editing (Supporting).

Dimas Barrêto de Queiroz: Conceptualization (Lead); Formal Analysis (Lead); Investigation (Lead); Methodology (Lead); Software (Lead); Supervision (Lead); Writing - original draft (Lead); Writing - review & editing (Lead).

Edilson Paulo: Conceptualization (Lead); Formal Analysis (Lead); Investigation (Lead); Methodology (Lead); Software (Lead); Supervision (Lead); Writing - original draft (Lead); Writing - review & editing (Lead).

DATA AVAILABILITY

The dataset supporting the results of this study is not publicly available.