

Political Cycles and Budget Management in Brazilian States through Unpaid Commitments

Ciclos Políticos e Gerenciamento Orçamentário nos Estados Brasileiros por meio dos Restos a Pagar

Ciclos Políticos y Gestión Presupuestaria en los Estados brasileños a través de Saldos a Pagar

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Abstract: *The Theory of Political Cycles has been studied in recent decades in association with variables that seek to explain the opportunistic behavior of governors. This study sought to assess the influence of electoral political cycles on budget management through unpaid commitments in Brazilian states from 2011 to 2022. The dependent variable consists of budget management, obtained from the accumulation or reversal of unpaid commitments. The independent variables are related to political factors, such as the pre-election and election years, and the governor's office, in order to check which candidates were up for re-election. Panel data regression was used to analyze the data. Minas Gerais was omitted from the analysis because it did not have data on expenses paid in the years 2011 to 2013. The period analyzed consists of three complete electoral cycles. The results show there is a positive and statistically significant influence of the independent variables on the dependent variable, confirming the study hypotheses, and supporting the idea which governors use budget management tool in order to signal competence, in line with the theoretical basis of political-budgetary cycles, and succeed in elections. This research has contributed to the literature on political-budgetary cycles by describing that their occurrence affects the dynamics of the accumulation and reversal of unpaid commitments capable of influencing electoral results.*

Keywords: *Political budget-cycles. Unpaid commitments. Budget management.*

Resumo: A Teoria dos Ciclos Políticos tem sido estudada nas últimas décadas associada a variáveis que buscam explicar o comportamento oportunista de governantes. O presente trabalho buscou avaliar a influência dos ciclos políticos eleitorais sobre o gerenciamento orçamentário por meio dos restos a pagar nos estados brasileiros no período de 2011 a 2022. A variável dependente consiste no gerenciamento orçamentário, obtido a partir do acúmulo ou reversão dos restos a pagar. As variáveis independentes relacionam-se a fatores políticos, como os anos pré-eleitorais e eleitorais, e o mandato do governador, para verificar os candidatos aptos à reeleição. Para a análise dos dados foi utilizada uma regressão com dados em painel. O estado de Minas Gerais foi omitido da análise por não dispor dos dados relativos às despesas pagas nos anos de 2011 a 2013. O período analisado consiste em três ciclos eleitorais completos. Os resultados

evidenciaram que há influência positiva e estatisticamente significativa das variáveis independentes sobre a dependente, confirmando as hipóteses arguidas, sustentando que os governadores utilizam o instituto dos restos a pagar como instrumento de gerenciamento orçamentário com vistas a sinalizar competência, conforme a base teórica dos ciclos políticos-orçamentários, e obter êxito nas eleições. Esta pesquisa contribuiu para a literatura dos ciclos políticos-orçamentários ao descrever que sua ocorrência afeta a dinâmica de acúmulo e reversão dos restos a pagar capazes de influenciar resultados eleitorais.

Palavras-chave: Ciclos políticos-orçamentários. Restos a Pagar. Gerenciamento orçamentário.

Resumen: *La Teoría de los Ciclos Políticos ha sido estudiada en las últimas décadas en asociación con variables que buscan explicar el comportamiento oportunista de los gobernantes. Este estudio buscó evaluar la influencia de los ciclos políticos electorales en la gestión presupuestaria a través de los saldos a pagar en los estados brasileños entre 2011 y 2022. La variable dependiente consiste en la gestión presupuestaria, obtenida a partir de la acumulación o reversión de los saldos a pagar. Las variables independientes se refieren a factores políticos, como los años preelectorales y electorales, y el mandato del gobernador, para comprobar qué candidatos se presentan a la reelección. Para analizar los datos se utilizó la regresión de datos de panel. El estado de Minas Gerais se omitió del análisis porque no disponía de datos sobre los gastos pagados en los años 2011 a 2013. El periodo analizado consta de tres ciclos electorales completos. Los resultados mostraron que existe una influencia positiva y estadísticamente significativa de las variables independientes sobre la variable dependiente, confirmando las hipótesis planteadas. Esta investigación contribuyó a la literatura sobre ciclos político-presupuestarios al describir que su ocurrencia afecta a la dinámica de acumulación y reversión de saldos a pagar capaz de influir en los resultados electorales.*

Palabras clave: Ciclos políticos-presupuestarios. Restos por pagar. Gestión presupuestaria.

Introduction

The Public Budget is an important tool for planning, executing, and controlling government work programs at the municipal, state, and federal levels. Although the Public Budget is constituted by laws and drafted according to principles that aim to serve the public interest, it is clear there is significant political influence over its composition (Gonçalves, Silva, Silva, Giraldi, & Oliveira, 2020).

This is due, in part, to the techniques used in Brazilian budget preparation, which allow public managers to use their discretion to determine which government programs will receive resources, which, in certain cases, implies the misuse of these resources, with the public interest being neglected in favor of advantages for political groups, such as keeping the manager or group in power. (Arrow, 1951; Black, 1958; Buchanan and Tullock, 1962; Downs, 1957).

This discretion in the allocation of public resources can be analyzed from the perspective of political cycles, which highlight the effect extent of electoral interests. This concept began to be explored in Nordhaus's (1975) study, which found interference in macroeconomic policy, specifically in the relationship between inflation and unemployment (Phillips curve) during the electoral cycle, an approach known to academics as the *Political Business Cycle*.

In turn, Rogoff (1990) suggested an approach to verify the manipulation of fiscal policy elements, such as revenue foregone and the composition of expenditures. This perspective, known as *Political Budget Cycle*, suggests public managers use their discretion in executing budgets to alter the structure of expenditures and revenues, changing voters' perceptions of the conduct of public finances.

These dysfunctions, which occur due to the electoral calendar and are studied by Political Cycle Theory, can be understood as a bias of Agency Theory (Jensen & Meckling, 1976), which revolves around the conflict of interest between an agent and a main one, due to informational asymmetry, which, although it emerged as a way of explaining business relationships, is present in a variety of

social and economic relations, such as in the public sector (Eisenhardt, 1989; Przeworski, 1998).

In summary, there is a contractual definition of an activity to be carried out by the agent who must represent the main interests, who grants decision-making powers. However, motivated by their own interests, agents may end up tangentially pursuing their own objectives when these conflict with the contracted ones. As a way of appeasing this conflict, contracts provide for control mechanisms such as limitation of power and accountability.

Similarly, government officials, seeking to maintain their political positions and keep their political allies in power, use opportunistic behaviors, concentrating spending on elements that can improve the image of the manager and generate the desired benefit according to the electoral calendar, as shown by national and international research (Alt & Lassen, 2006; Brender & Drazen, 2005; Haan, 2013; Hanusch, 2012; Khemani, 2004; Sakurai, 2005, 2009; Sakurai & Menezes Filho, 2011; Shi & Svensson, 2006; Veiga & Veiga, 2007; Vergne, 2009) and thus benefit from the analytical myopia of the electorate to win at the polls.

However, the intensity of these electoral cycles can be influenced by several factors, including the level of institutionalization and the degree of economic development in emerging countries, where the level of information that reaches voters and their ability to interpret that information contribute to factors which hinder the *accountancy*, making them more susceptible to the visibility provided by the opportunistic supply of more goods and services to society adjusted to the electoral calendar, leaving room for the *policymakers* use the state structure as a source of private advantages and manipulate information (Shi & Svensson, 2006; Vergne, 2009).

The budgetary system characteristics can also open the door to opportunistic behavior by managers. The Principle of Annuality, found in Article 35 of law No. 4,320/1964, establishes that transactions occurring during the fiscal year, which coincides with the calendar year, should be understood as expenses. Failure to use budgetary appropriations in the current year would result in the loss of these appropriations. Thus, this characteristic creates a “use it or lose it” incentive.” (*Use or lose it*), even when there is no interest for the administration to use them during that period, resulting in their subsequent registration as outstanding payments (Souza, 2010).

Therefore, this study aims to analyze the influence of electoral political cycles on budget management through the dynamics of accumulation and reversal of outstanding payments in Brazilian states. To this end, we used the premise that outstanding payments can be accumulated from one period to another or reversed (paid or canceled) depending on the manager's interest. The manager, in turn, seeks to obtain electoral advantages through this management. We also start from the premise that managers in their first term have more incentives to manipulate budget variables.

This study contributes to the literature on political cycles by empirically demonstrating the existence of cyclical behavior in outstanding payments adjusted to electoral cycles in Brazilian states, highlighting the strategic use of this institution by managers for electoral purposes. It was found that governors accumulate outstanding payments in the years leading up to elections and reverse them, either through payment or cancellation, in election years. This increases our understanding of how budgetary variables are manipulated in relation to the electoral cycle.

Theoretical elements of the research

Up to the introduction of Kalecki's idea in 1943, economists isolated economic analyses from political factors (Fialho, 1999; Siqueira, 2016). For Kalecki (1943), the government would be an actor which would reflect in the economy the pressures suffered by those who hold a significant portion of

the workforce, this being the first political use of economic manipulation. Downs (1957) explains that, in a democracy in which voters are rational, the efforts promoted by political leaders are carried out solely in the interest of themselves or their allies, with policies being implemented merely as a by-product of the pursuit of their private goals, namely income, power, and prestige, conferred by the exercise of office.

Thus, it is assumed the actions of those aspiring to power are merely a way of maximizing personal interest, in this case, by obtaining the majority of votes and success in the elections, regardless the present or future consequences for the economy.

These studies brought with them a still incipient idea of what would become the Theory of Political Cycles, which had prominence and greater notoriety from Nordhaus's study (1975) (Preussler; Portugal, 2003). Nordhaus (1975) brought forth the more consistent idea of opportunistic cycles motivated by elections, based on the observation that unplanned changes in economic policy coincided cyclically with the election period, denoted by a reduction in unemployment during the election period and a consequent increase in price levels, followed by a reversal, thus formalizing the *Political Business Cycle*. The author assumes the electorate's knowledge of the *trade-off*. The trade-off between inflation and unemployment is incipient, so, it allows the use of a position on the preference among lower unemployment or lower prices (inflation).

Following the reasoning proposed by the author, voters establish a model of actions or economic positions of a government or political party, with the determining factor for voting being the fulfillment of expectations, which serves as an incentive for politicians to signal their fulfillment on the eve of the election, expressing a myopic view of the actions taken, which enables the occurrence of political-economic cycles as a way of obtaining the expected electoral results.

Hibbs' work (1977) also contributes to the development of Political Cycle Theory, considering that, from now on, choices will be made according to the ideological identity of voters, with those on the right normally opting for lower inflation rates, even if this means higher unemployment rates, while those on the left of the ideological spectrum opt for lower unemployment rates. Also, according to Hibbs (1977), citizens who choose to align themselves with left-wing parties are those whose base is mainly represented by working-class individuals, which justifies the choice of lower unemployment rates, since the income of a significant portion would be sharply affected. On the other hand, those with right-wing ideological positions are usually those who hold most of the financial capital.

Rogoff and Sibert (1988) and Rogoff (1990) assume in their political cycle capture model which voters' expectations are rational and they come to understand fluctuations in the economy are due to electoral factors. For Rogoff (1990), voters can assess the manager's competence according to the changes he promotes in fiscal policy, in pre-election periods, mainly through signaling with fiscal variables that are more noticeable to citizens, such as tax revenue waivers and increased current expenditures at the expense of investments. Thus, the *Political Budget Cycle* in literature.

Rogoff (1990) further argues that, in a context of asymmetric information, in which voters do not know the real capacity of government candidates to manage public resources well, the political-budgetary cycle extinction can be costly and reduce the welfare that should be generated for society, since, with a view to projecting their image and seeking to maintain power, managers would use potentially more costly ways to signal their competencies.

Drazen (2001) assessed the model which considers manipulations in fiscal variables better fits the conceptual structure and data from an empirical perspective. For the author, it is easier for a politician

to interfere in the area that depends more on their choices, than in monetary policy, which has a technical apparatus, such as central banks, that is more resistant to expansionary policies based on mere electoral interest.

The most frequent studies seek to highlight the political-budgetary cycles in democracies. For Puchale, Pereira, and Veloso (2018), who evaluated evidence of political-budgetary cycles in federal spending from 1994 to 2014, part of the economic fluctuations can be explained by political factors.

Schneider (2010) concludes there are fiscal alternatives for managing results and that, as an alternative to increasing spending for fear of negative interpretation, political leaders in West German states tend to reallocate resources to expenditure groups that proclaim their ability to govern.

Vergne (2009), analyzing data from 42 developing countries, argues political-budgetary cycles occur more frequently and with greater force in these countries, and that notably, leaders do not conduct fiscal policy toward deficit, but rather redirect resources to current expenditure groups such as wages and subsidies. The author also warns against analyses that consider the overall budget result as a product of cycles, stating that the essence may be lost, since politicians can alter the composition of spending and this will not necessarily be reflected in the result, emphasizing the importance of more detailed analyses.

Contrary to Vergne (2009), Veiga and Veiga (2007a), when applying the model to Portuguese municipalities, and Drazen and Eslava (2010) in Colombian municipalities, and Vicente and Nascimento (2012) in Brazilian municipalities, found the most notable expenditures for signaling competence are directed toward investments, capital expenditures.

Still at the national level, Sakurai (2009) concluded that in Brazilian municipalities, from 1990 and 2005, political-budgetary cycles were most evident in the areas of health and sanitation, housing and urban planning, social assistance and welfare, and transportation. Queiroz (2015) corroborates this finding by concluding that the parties that were most successful in winning re-election in municipal elections from 2004 and 2012 were those whose leaders increased investment spending and reduced personnel and other current expenses.

However, Shi and Svensson (2002) noted the occurrence of fiscal cycles coinciding with the election period based on budget results, with underdeveloped countries showing this more clearly than others, in addition to finding that the level of transparency acts as a conditioning factor for prevalence. Alt and Lassen (2006) reached a similar conclusion when evaluating data from 19 countries of the Organization for Economic Cooperation and Development (OECD), where the scenario persists in those less transparent with regard to fiscal policy, and political polarization also contributes to this phenomenon.

Vicente, Benito, and Bastida (2013) evaluated the occurrence of electoral cycles in the largest Spanish municipalities in relation to the transparency given by a local indicator, and concluded in those where the index is lower, the cycle occurs in total spending. Herzog (2017) observed in 99 developing countries and 34 OECD countries that transparency mitigates political-budgetary cycles.

Souza, Azevedo, and Crozatti (2021) examined the behavior of contingency reserves in Brazilian municipalities according to political opportunism. The results indicated municipalities with re-elected managers did not use contingency reserves politically in the pre-election period, unlike those which did not achieve re-election or succession, a group for which an increase in the average was observed in the period leading up to the elections for no apparent reason, since the behavior diverges from the observed for municipalities that presented positive results (surplus), considered correct by the authors.

Bartoluzzio and Dos Anjos (2020) analyzed how political incentives affect the fiscal quality of Brazilian municipalities based on the IFGF (Firjan Fiscal Management Index). The results indicated that re-elected mayors achieved better levels of fiscal quality in the election year, however, negative relationships for re-election or the start of a new administration were found for the post-election year, indicating a difficulty in the first year of the term. The authors also suggest outstanding payments may be a budget adjustment tool in municipalities with low liquidity indices.

The concept of outstanding payments in Brazil is defined in Article 36 of Law No. 4.320/1964, which sets forth the general rules of financial law for the preparation and control of budgets and balance sheets of the Union, states, municipalities, and the Federal District. The legal concept of outstanding payments dictates that they are nothing more than expenses committed and not paid by December 31 of the fiscal year in which the commitment was made.

It should be noted here outstanding payments should not always be viewed as discretionary, there are circumstances in which they arise from the natural activity of the State, as provided for in the sole paragraph of the aforementioned Article 36, when the fulfillment of the committed obligation does not occur in the fiscal year and, therefore, cannot be limited by the principle of annuality, and should only be computed as outstanding payments in the last year of the credit term (Brazil, 1964).

For a better understanding of this concept, it is also important to understand the concept of public sector expenditure, established in the aforementioned legislation, which determines that, for budgetary purposes, it should be accounted for on an accrual basis, i.e., regardless of the disbursement of funds, which occurs in its final stage. For information purposes, expenditure must go through three stages: commitment, settlement, and payment (Brazil, 1964). The commitment stage consists of reserving the budget allocation which creates a payment obligation for the State. Settlement translates the contracted good or service was delivered or provided in accordance with the prior specifications. Payment is the actual disbursement of the funds.

Outstanding payments are divided into two types based on the stage of expense settlement: processed and unprocessed. Processed payments are those whose expenses have passed through the settlement stage. Unprocessed payments represent commitments for which only the budget allocation has been reserved. One problem associated with the indiscriminate use of this expedient is the formation of a kind of parallel budget (Aquino & Azevedo, 2017; Furiati, 2011). At its core, the recording of outstanding payments, both processed and unprocessed, as considered in the study by Silva (2007), worsens the quality of information on public spending, while compromising understanding of the primary result. The author also argues the recording of outstanding payments implies the assumption of obligations in excess of the amount supported in the following year's budget. In addition to the loss of informational quality mentioned above, there is also a loss in the quality of the goods or services offered to society (Barbosa & Rodrigues, 2023).

Liebman and Mahoney (2013) consider the expiration of the right to use uncommitted credits at the end of a fiscal year as an incentive for the inefficient and arbitrary use of resources, expressed in the term "use it or lose it." (*use it or lose it*). At the international level, there are relevant discussions about the temporality of the budget. Carvalho (2013) points out that in OECD countries, it is common to see the figure of the *carry-over*, which allows unused appropriations to be carried over to subsequent fiscal years. This practice of postponing the payment of expenses by recording them as outstanding liabilities without financial backing is seen by Aquino and Azevedo (2017) as a regulatory problem that affects the transparency and credibility of the public budget, as a consequence

of the increase in financial liabilities.

The results of Carvalho's study (2013) also suggest that outstanding payments function as an exception to the principle of budget annuality, whereby it is possible to transfer expenses incurred in previous years to subsequent years. For the author, this is a problem of oversizing the capacity to fix expenses in relation to the actual capacity for execution. The *carry-over* Unused appropriations alter the priority of use of the resources collected in the following fiscal year, since they would be overlooked due to these debts carried over from the previous fiscal year, which, when contemplating a possible deficit, would be opportunistic, such as the potential registration of current commitments for the following fiscal year.

The hypotheses formulated in this study consider this premise, with the years preceding government elections, especially the immediately preceding pre-election year, being a gap for the accumulation of outstanding payments and the election year being an opportunity for reversal, through payment or cancellation, as a way of signaling competence to society, which may interfere, as seen elsewhere, in election results. Furthermore, the literature widely recognizes this mechanism as an instrument of political bargaining in negotiations involving discretionary spending (Camargo, 2014; Silva, 2007).

The effect known as *float*, in the context described here, this consists of canceling outstanding payments in subsequent fiscal years, generating opaque information, allowing for opportunistic behavior by managers, and resulting in earnings management, as defined in this study (Araújo, 2022).

Thus, the independent variables were selected considering the following research hypotheses:

H₁: In the year preceding elections, governors tend to accumulate outstanding payments to obtain a “budgetary slack” in the election year.

H₂: In the election year, governors tend to execute outstanding payments accumulated in past periods, seeking to obtain electoral benefits.

H₃: The electoral cycle on outstanding payments is enhanced when managers are in their first term.

Methodological elements of the research

The object of study in this research consists of Brazilian states. This choice is justified due to the accessibility of information about elections and detailed data on budgetary variables. The research sample consists of 25 states of the federation from 2011 to 2022, comprising 300 observations and three complete electoral cycles.

For this research, a regression with balanced panel data was used, which justifies the exclusion of Minas Gerais from the universe of 26 states, due to the unavailability of data on expenses paid from 2010 to 2013.

The data collection process was conducted exclusively online. Electoral information was collected directly from the Superior Electoral Court (TSE) website. Budget data, outstanding payments, processed and unprocessed, registered, canceled, and paid, and the total budget expenditure was collected in the Brazilian Public Sector Accounting and Tax Information System (SICONFI), through Annex XVIII of the Summary Report on Budget Execution (RREO) for the sixth two-month period of each fiscal year and for each entity, and from the Annual Balance Sheet (QDCC) in years when the column on expenses paid was not an integral part of the Budget Balance Sheet. Finally, data on the population were collected from the website of the Brazilian Institute of Geography and Statistics

(IBGE).

Definition of Variables and Econometric Model

The dependent variable consists of an indicator capable of capturing the accumulation and reversal of outstanding payments over the years of the electoral cycle. For this research, this indicator was called budget management. It should be noted the accumulation is materialized by the registration of outstanding payments at the end of the fiscal year, and the reversal can occur through payment or cancellation. This research chose to use the variable constructed by Araújo (2022), with one substantial difference. In that model, for the purpose of eliminating the scale effect, the difference among the outstanding recorded and paid payments, added to those canceled, was divided by the budgeted expenditure. In this study, we opted for committed expenditure, considered as budgetary expenditure in Article 35 of Law No. 4,320/1964, as the denominator. The equation used to capture the variable of interest is as follows:

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

Where,

- GO_{it} corresponds to the budget management of government i in period t ;
- RP_{it} corresponds to the outstanding payments of government i calculated in period t ;
- $PagRP_{it}$ corresponds to the payment of outstanding payments made by government i in period t ;
- $CanRP_{it}$ corresponds to the cancellation of outstanding payments made in period t by government i ;
- $DespTot_{it}$ corresponds to the total expenditure committed by the government i in period t .

The independent variables were established considering the research objectives and are summarized in Table 1:

Table 1

Description of Variables

Variable	Description	Expected Signal
PrE	Variable receives the value “1” for the year preceding state elections and “0” for other years.	+
E	Variable receives the value “1” for the election year and “0” for other years.	-
ME	Variable receives the value “1” if the governor is in his first term and “0” if he is in his second term.	+

Source: Prepared by the authors.

Considering the dependent and independent variables, this study proposes an econometric regression model with panel data, as shown in Equation 02:

$$GO_{it} = \beta_0_{it} + \beta_1 PrE_{it} + \beta_2 E_{it} + \beta_3 ME_{it} + \varepsilon_{it} \quad (2)$$

Where,

- GO_{it} corresponds to the budget management of government i in period t ;
- PrE_{it} corresponds to the pre-election year, being a dummy variable in which 1 indicates the year preceding the elections and 0 for the others;
- E_{it} corresponds to the election year, being a dummy variable where 1 indicates the election year and 0 for the others;
- ME_{it} corresponds to the manager in his first term, being a dummy variable where 1 indicates the four years of the manager's first term and 0 for the others.
- ε corresponds to the regression error.

The analysis consisted of a descriptive part, followed by statistical inference, in which panel data regression is presented.

Presentation and discussion of results

Descriptive Analysis

The variables of interest refer to dummies representing the factors conditioning the existence of political-budgetary cycles. Table 2 presents the descriptive statistics of the sample, showing the means and standard deviations of the variable dependent on this research, which captures budget management through outstanding payments. For the purpose of comparing the averages, the nonparametric Mann-Whitney test was performed.

Table 2

Descriptive Statistics

Panel A: Pre-Election Year			
Item	Pre-election year	Other Years	Mann-Whitney ⁺
Mean	0.026931323	0.008189877	0.000
Standard Deviation	0.04119201	0.038873612	
Panel B: Election Year			
Item	Ano Eleitoral	Demais Anos	Mann-Whitney ⁺
Mean	-0.006819294	0.019440083	0.000
Standard Deviation	0.038141498	0.03880916	
Panel C: Term of Office			
Item	First Term	Second Term	Mann-Whitney ⁺
Mean	0.016703054	0.003653682	0.001
Standard Deviation	0.04241547	0.03280468	

Source: Prepared by the authors.

Note: The + symbol means that the values shown indicate the p-value of the respective test.

Evaluating the pre-election year factor (PrE) in Panel A, the average of 0.0269 shows that, of the budget expenditure committed in pre-election years, an average of 2.69% was carried over to the following fiscal years. This value is higher than the one obtained in other years, corroborating the result expected by H1. This panel analysis included 75 observations related to pre-election years and 225 observations related to other years.

Panel B evaluates the election year factor (Et). The sample consists of three election years: 2014, 2018, and 2022. Thus, Et variable has 75 observations for election years and 225 observations for non-election years, comprising the nine non-election years in the sample multiplied by 25 states. It can be observed that election years have a lower average than other years and a negative sign, which implies the reversal of outstanding payments recorded in previous fiscal years, that is, approximately 0.68% of budget expenditure was reversed. For this to occur, the sum of the amount paid and canceled must be greater than the amount recorded in the fiscal year. Therefore, the expected result for H2 was obtained.

Panel C shows the means and standard deviations of the interest variable related to the states in which governors had their first and second terms, with a view to differentiating the behavior of legally re-electable managers. It should be noted governors serving their first term are represented by 212 observations, and those serving their second term by 88 observations. It was found states in which governors were in their first term had higher averages than those in their second term, corroborating H3 of this study, which suggests first-term administrators eligible for reelection have greater incentives to manage budget results through the accumulation of outstanding payments. The Mann-Whitney test confirms the alignment of the hypotheses studied with the data obtained, asserting that the averages differ with statistical significance.

Influence of election years on outstanding payments

Moving to the second phase of data analysis, Table 3 presents the results of the regression model. It should be noted the panel specification tests (Chow, Breusch-Pagan, and Hausman tests) indicated the use of a random effects panel.

Table 3

Influence of election years and terms of office on budget management

Explanatory Variable	Coefficients	Standard Error	Z-statistic	P-value
Constant	0.0750	0.0422	1.776	0.0758
APE	0.0113	0.0052	2.178	0.0294
AE	-0.0224	0.0052	-4.297	0.0000
PM	0.0121	0.0050	2.411	0.0159
POP	-0.0044	0.0027	-1.634	0.1022
Description	Value	Description	Value	
<i>Jarque –Bera</i>	535.07	<i>Jarque –Bera</i> (p-valor)	0.0000	
<i>Wooldridge</i>	0.9675	<i>Wooldridge</i> (p-valor)	0.3351	

Source: Prepared by the authors.

Note: AE = Election Year; APE = Pre-election Year; PM = First Term; POP = Natural Population Growth

In pre-election year, the variable of interest APE showed a positive sign. This result indicates there is an accumulation of outstanding payments in pre-election years in the order of 0.0113, with the other variables remaining constant. Thus, the theoretical expectation established by H1 is confirmed, as it is evident that the year preceding the election influences the amount of outstanding payments. For Silva (2007), this discretionary accumulation worsens the quality of public spending. Aquino and Azevedo (2017) confirm this thesis by stating that this technique worsens the transparency and credibility of the budget and may culminate in adverse selection. Bartoluzzio and Dos Anjos (2020) point out the use of outstanding payments for carry-over is a discussion that is evident in the Firjan System, and that it is

common among municipalities with compromised liquidity indices, which implies an inability to honor such commitments.

With regard to the AE factor, it can be observed it presented a negative sign. This evidence indicates there is a reversal of outstanding payments in election years. The analysis of the election year factor corroborates the findings of Araújo (2022), who found evidence of budget management through outstanding payments in election years in Brazilian municipalities. So, the theoretical view that politicians tend to modify fiscal variables during the election period is reaffirmed, validating H2.

Finally, the variable result of PM shows that governors in their first term differ significantly from those in their second term in terms of the accumulation of remaining to be paid. This confirms the theoretical assumption established in H3. The results of this analysis corroborate those of Klein and Sakurai (2015), who analyzed the temporality of incentives related to mayors' electoral terms in Brazil. Furthermore, Bartoluzzio and Dos Anjos (2020) found a negative relationship between the first term and fiscal management, especially during election periods, indicating managers in their first term are more likely to spend money to influence election results.

The findings of this study are also consistent with the inference made by Queiroz, Morais, Souza, and Silva (2019), who conditioned, not exclusively, the occurrence of political-budgetary cycles to the electoral mandate factor, with the corollary being the results manifested in their study, where public managers in their first term, theoretically eligible for reelection, showed a greater tendency toward fiscal manipulation in pursuit of electoral success.

In summary, descriptive statistics show the use of outstanding payments as a means of budget management presents statistically significant differences from years of election and non-election, pre-election and other years, as well as among managers in their first and second terms.

The evidence obtained by this research confirms the theoretical assumptions that managers manipulate the budget for personal gain. This fact can be observed from the behavior of the budget management variable, which behaves cyclically throughout the electoral cycle, justified by an increase in the registration of outstanding payments in the year preceding the elections to create a budget surplus in the election year, and a reversal in the election year of part of the outstanding payments that were accumulated in previous periods and, especially, in the immediately preceding year, either through payment or cancellation. Finally, it was observed governors in their first term manage outstanding payments more than those in their second term, confirming the theoretical assumptions of this research. Finally, it should be noted POP control variable did not show statistical significance capable of contributing to the conclusion by fulfilling the hypotheses raised.

Final Thoughts

The theoretical basis presented on the theory of political cycles, which has been updated by studies such as this one to add new perspectives in an attempt to explain the behavior of policymakers, shows budgetary variables are an instrument sensitive to discretionary actions aimed at manipulating election results, according to the findings of this study.

The population's short-sightedness regarding government actions, combined with Brazil's budgetary characteristics, is considered an incentive to promote budget changes adjusted to the electoral calendar. In this study, when analyzing budgetary normality with regard to outstanding payments, especially seeking evidence of the use of carry-overs, strong indications were obtained that corroborate the discussions about use it or lose it, which can be considered a loophole in the legislation

that allows expenses to be calculated based on their commitment even when it is not in the administration's interest during the period, thus creating a budgetary slack.

Thus, the transfer of unfunded obligations to subsequent fiscal years via carry-over ultimately promotes changes in the financial planning for the year following enrollment, since the resources that would be allocated to specific actions in the annual budget are overlooked in favor of commitments from previous fiscal years, thereby affecting the balance of public accounts.

Therefore, further studies can be developed to assess the effect of this technique on the level of discretion in carryovers to election years, analyze the quality of public spending using indicators when the use of unsecured funding in accordance with “use or lose it” principle, as well as relating the occurrence of the phenomenon now confirmed to local levels of transparency

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