
THE INFLUENCE OF POLITICAL BUDGET CYCLES AND PARTY IDEOLOGIES ON PERSONNEL EXPENDITURE IN BRAZILIAN STATES

Tadeu Junior de Castro Gonçalves ¹
Edna Maria da Silva Medeiros de Oliveira ²
Gessiane da Silva Paulino ³
Severino Cesário de Lima ⁴
Anderson Luiz Rezende Mól ⁵

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ABSTRACT

This study aims to analyze the influence of political budgetary cycles, represented by the variables electoral year, change of governor, and first electoral term, as well as the party ideology on the personnel expenditure of Brazilian states in the light of the theory of the political cycle. To this end, electoral and fiscal information of Brazilian governors and states was used, comprising the period of two elections (2011-2018). A regression model with panel data by fixed effects was used. The results show a negative influence of the election year and right-wing party ideology variables and a positive influence of the governor change and population variables on personnel expenditure. The results allow us to infer that the presence of fiscal rules and the attempt to avoid opportunistic management by managers generate the expected effects on the Fiscal Responsibility Law. As for originality and relevance, previous studies reveal several contradictions, which expose gaps and favorable scenarios for new discussions. Despite the affinity with

¹ Doutorando do Programa de Pós-Graduação em Contabilidade da Universidade Federal de Santa Catarina – UFSC. Endereço: Universidade Federal de Santa Catarina, Campus Reitor João David Ferreira Lima, s/n, Bairro Trindade. CEP 88040-900 – Florianópolis, SC – Brasil. E-mail: tadeu.goncalves@posgrad.ufsc.br. Telefone: 55(48)3721-3891. <https://orcid.org/0000-0002-2888-1773>

² Mestre em Ciências Contábeis pela Universidade Federal Do Rio Grande Do Norte - UFRN. Endereço: Rua Piloto Pereira Tim, 176 – Centro. CEP 59140-001- Parnamirim/RN. E-mail: ednamsmac@yahoo.com.br. Telefone: 55(84)99630-2211. <https://orcid.org/0000-0003-1712-1186>

³ Doutoranda do Programa de Pós-Graduação em Economia da Universidade Federal do Pará – UFPA. Endereço: Rua Augusto Corrêa - até 937 Guamá - 66075110 - Belém, PA – Brasil E-mail: gessianepaulino18@gmail.com. Telefone: 55(91) 3201-7000. <https://orcid.org/0000-0002-4164-3323>

⁴ Doutor em Controladoria e Contabilidade pela Universidade de São Paulo – USP. Endereço: Universidade Federal do Rio Grande do Norte. Departamento de Ciências Contábeis, Campus Universitário, Lagoa Nova Cep: 59000-000 – Natal/RN – Brasil. E-mail: svrnolima@hotmail.com. Telefone: 55 (84) 99480-6836. <https://orcid.org/0000-0002-6034-4409>

⁵ Doutor em Econometria e Finanças pela Universidade Federal Lavras - UFLA. Endereço: Universidade Federal do Rio Grande do Norte, Departamento de Ciências Administrativas, Campus Universitário, Lagoa Nova Cep: 59072-970 – Natal/RN – Brasil. E-mail: mol.ufrn@gmail.com. Telefone: 55(84) 3215-3536. <https://orcid.org/0000-0001-5915-8070>

previous studies, this research differs by investigating three items that give it originality, namely: (i) analyzing two electoral cycles comprising the years 2011 to 2018, (ii) configuration of the variable of interest, and (iii) methodological procedures adopted. As contributions, besides comparing and validating previous assumptions, the advance in this knowledge may improve the understanding of the effects of political cycles on public spending.

Keywords: Political Cycles. Party Ideology. Personnel Expense. Fiscal Responsibility Law.

A INFLUÊNCIA DOS CICLOS POLÍTICO-ORÇAMENTÁRIOS E DAS IDEOLOGIAS PARTIDÁRIAS NA DESPESA COM PESSOAL DOS ESTADOS BRASILEIROS

RESUMO

Este estudo objetiva analisar a influência dos ciclos político-orçamentários, representados pelas variáveis ano eleitoral, mudança de governador e primeiro mandato eleitoral, bem como a ideologia partidária sobre a despesa com pessoal dos estados brasileiros à luz da teoria dos ciclos políticos. Para tanto, foram utilizadas informações eleitorais e fiscais de governadores e estados brasileiros, compreendendo o período de duas eleições (2011-2018). Utilizou-se modelo de regressão com dados em painel por efeitos fixos. Os resultados evidenciam influência negativa das variáveis ano eleitoral e ideologia partidária de direita, e influência positiva das variáveis mudança de governador e da população no gasto de despesa com pessoal. Os resultados permitem inferir que a presença de regras fiscais e a tentativa de evitar o gerenciamento oportunístico por partes dos gestores estão gerando efeitos esperados na Lei de Responsabilidade Fiscal. Quanto originalidade e relevância, estudos anteriores revelam diversas contradições, no qual expõem lacunas e cenário favorável para novas discussões. Apesar da afinidade com os estudos anteriores, esta pesquisa se diferencia ao investigar três itens que lhe dão originalidade, sendo: (i) analisar dois ciclos eleitorais compreendendo os anos de 2011 a 2018, (ii) configuração da variável de interesse e, (iii) procedimentos metodológicos adotados. Como contribuições, além de comparar e validar suposições anteriores, o avanço neste conhecimento pode melhorar a compreensão dos efeitos dos ciclos políticos sobre o gasto público.

Palavras-Chave: Ciclos Políticos. Ideologia Partidária. Despesa com Pessoal. Lei de Responsabilidade Fiscal.

1 INTRODUCTION

Several countries transferred fiscal and political powers to subnational governments, and among the reasons that favored the adoption of decentralization is the search for efficiency in public sector spending (Calderini, 2011; Martinez-Vazquez et al., 2017). Martinez-Vazquez et al. (2017) state that subnational governments are key elements in delivering public goods and services

to citizens, making it increasingly important to know the impact of fiscal decentralization on the economy, society, and politics.

When it comes to politics, the political office has become very coveted, causing politicians to strive to succeed in the election. Thus, electoral motives and party ideologies can influence budget composition (Potrafke, 2020), where governments (mayors, governors, and managers in general) can strategically manipulate fiscal policy tools to win elections, such as reducing taxes before claims and changes in the budget composition (Klein & Sakurai, 2015; Alesina & Paradise, 2017). Such behavior is investigated through studies on political cycles, an area of knowledge that discusses the management and manipulation of fiscal, monetary, and policy distributions in pre- and post-election periods (Philips, 2020).

Bartoluzzio and Anjos (2020) argue that the literature on political cycles reveals that fiscal management can be manipulated for electoral purposes in at least two ways: (i) by increasing public expenditure, aiming at signaling competences to voters, and (ii) by manipulating the composition of expenditure for categories valued by voters, as politicians seek to demonstrate that they share the same fiscal priorities as citizens.

In this sense, considering the complexity of the Brazilian political system adopted, many political decisions reflect the opportunistic interests of public managers that override the desires of society. In this line of thought, Fiirst et al. (2019) comment that one of the ways to capture such opportunistic behaviors is to observe financial performance.

In a broad sense, the theory of political cycles is based on the relationship between the proximity of elections and the choice of policies (Martinez, 2009). This theory has been the subject of several studies, from the seminal ones (Downs, 1957; Nordhaus, 1975; Rogoff, 1990) to the most current ones (Araújo et al., 2016; Gonçalves et al., 2017; Queiroz, 2018; Morais et al., 2019; Bonfatti & Forni, 2019; Bostashvili & Ujhelyi, 2019; Bartoluzzio & Anjos, 2020; Gootjes et al., 2020; Fukumoto et al., 2020; Garcia & Hayo, 2021; Wiguna & Khoirunurrofik, 2021).

Downs (1957) shows that the function of politicians in power is to aim for the election's success, not interested in the well-being of society, but in private reasons. Nordhaus (1975) reports on the influence of political variables on the voter's choice of candidate, and Rogoff (1990) reported on the management of fiscal variables and electoral cycles, in which he branched the theory of political cycles into the so-called political budget cycle.

In this discussion, Araújo et al. (2016) analyzed the theory of political cycles in Brazilian states from 1995 to 2008 and the influence of party ideology on spending. The results indicated increased spending in election years and different behaviors according to party ideology. Finally, Gonçalves et al. (2017) evaluated whether political cycles and ideological bias significantly impact public resource allocation decisions in infrastructure investments in Brazilian states. Among the results, the authors show an influence of the electoral cycle when considering ideological differences interacting with the electoral cycles.

Also, according to previous studies, Morais et al. (2019) analyzed the influence of political factors on the Personnel Consumption Expenditure Index (PCE) defined by the Brazilian Fiscal Responsibility Law (LRF). Among the results, it was possible to verify consistent evidence of opportunistic behavior by public

managers (mayors), casting doubt on the presence of fiscal rules as limiting political manipulations. Therefore, the authors conclude that political-budgetary cycles influence personnel expenditure despite fiscal rules, such as the Electoral Law and LRF.

This study considers electoral cycles and fiscal manipulation practices as a starting corollary, as well as the results of previous studies, and it is motivated by the following question: what is the influence of political-budgetary cycles and party ideologies on personnel expenses of Brazilian states?

The results of previous investigations, given the multiple pieces of evidence, are controversial and inconclusive. The ambiguity of evidence reveals contradictions, which point to the need to narrow the studies and shed light on new discussions.

In this thought, Fukumoto et al. (2021) report that the mixed results are justified, in part, by the non-random nature of the elections. Given this, this study aims to continue the research on fiscal management and electoral cycles, in which it focuses on the suggestions made by Morais et al. (2019), Queiroz (2018), and Queiroz et al. (2019), referring to conducting research at the state level, specifically, governors. Despite the affinity with previous studies, this study differs by investigating three items that give it originality: (i) analyzing two electoral cycles covering the years 2011 to 2018, (ii) configuration of the variable of interest, and (iii) methodological procedures adopted.

In line with the importance of carrying out the study, the advancement of this area of knowledge can improve the understanding of the effects of political cycles on financial performance on personnel expenses, contributing to the improvement of social observation of the effectiveness of public management (Fiirst et al., 2019). In addition, it seeks to contribute to social interest through the evidence on political characteristics and to broaden the discussion of the theory of political cycles and their relationship with public spending; this means that the exploration of policy cycles in government spending sub-levels is empirically relevant and can provide a better understanding of the phenomenon (Castro & Martins, 2018).

These results are important because they reinforce the evidence that developing countries are more susceptible to opportunistic fiscal manipulations. Furthermore, this study contributes to the literature on the importance of ideology to public finances, examining whether Brazilian governors' party affiliations influence how local budgets are managed (Sakurai & Menezes-Filho, 2011).

In addition to this section, this study extends into four more: in section 2, he comments on personnel expenses, political cycles, fiscal management, party ideology, and previous studies; then, in section 3, the methodological procedures are presented; in section 4, the data are described and discussed; finally, in section 5, the final considerations are presented.

2 THEORETICAL REFERENCE

2.1 Brazilian tax rule and limitations related to Personnel Expense

Article 167 of the Federal Constitution provides for prohibitions in the Brazilian budget, among which it establishes the fiscal rule provided for in item III, which

prohibits the carrying out of credit operations that exceed the number of capital expenditures, except for those authorized through additional or special credits with a precise purpose, approved by the Legislative Power by an absolute majority. This constitutional text establishes the fiscal rule to limit fiscal policy discretion by imposing numerical restrictions on budget aggregates and debt growth (Pires, 2019; Gootjes & Haan, 2022).

Complementary Law nº 101/2000 (LRF) appears to assess compliance with the tax rule and monitor the goals to be achieved. It establishes that responsibility in tax management presupposes planned and transparent action in which risks are prevented and corrected deviations capable of affecting the balance of public accounts through the achievement of results goals between revenues and expenses and compliance with limits and conditions regarding the waiver of revenues and generation of expenses.

Personnel expenditure shows a constant behavior among public expenditures and tends to increase. But, on the other hand, revenues tend to fluctuate and depend on the economy (Gadelha, 2011). In this sense, one of the parameters provided for in the LRF is the control of personnel expenses, established through limits concerning the Net Current Revenue (NCR), in each calculation period, for each federative entity: Union (50%), States (60%) and Municipalities (60%).

At the State level, the object of this study, the limit of 60% (sixty percent), covers the Legislative Power, including the State Audit Court, the Judiciary; the Executive Power; and the Public Ministry. In addition, in states with a Court of Auditors in the Municipalities, 0.4% of the limit from the Executive Branch will be transferred to the Legislative Branch.

In this context, Law nº 9.504/1977 regulates elections, establishes the parameters for personnel expenses before the elections, and limits public managers' conduct during electoral campaigns.

The next topic will discuss how governments, motivated by elections, seek to increase expenditure on services visible to voters (Potrafke, 2020). Cahan (2019) weaves that a key component that politicians can try to influence is employment, in which governors and their partisan allies can manage the ability to increase employment levels before elections, for example. Therefore, we seek to understand how personnel expenses in Brazilian states are influenced by the variables of electoral year, change of governors, and party ideology.

2.2 Theory of Political Cycles

Over the years, a significant body of economic and political literature has analyzed the behavior of voters and governments to unravel the exact nature of the relationship between politics and economics (Castro & Martins, 2018). The theory of political cycles studies how the proximity of elections affects political choices, where policymakers want to improve their reputation by targeting their chances of success in the election. In this way, it is common for politicians to induce better economic conditions in periods close to elections, as their success stems from their performance (Martinez, 2009; Fiirst et al., 2019).

Downs (1957), one of the main authors in the literature, argues that politicians and their coalitions are only interested in reelection. In line with this, Castro and Martins (2018) say that if cutting taxes means going into a spending frenzy that can bring electoral advantages to politicians, they will do it or at least try to do so. In this sense, the main implication of understanding the theory and its ramifications is that politicians implement expansionist policies before elections to maximize their electoral support and, after the elections, measures are needed to correct the generated imbalance (Castro & Martins), 2018).

Still, in terms of the so-called political cycles, they would be characterized by political choices in managerial decisions, considering the ruling party's ideological position (or lack thereof). Thus, the ideology of the party acronym, here organized into classes (left, center or right), would influence government decisions and, consequently, the economy (Gonçalves et al., 2017).

As a branch of political cycles, political-budgetary cycles are discussed, a theory of interest to studies of various research which has gained long-standing contributions (Aaskoven, 2018; Bonfatti & Forni, 2019; Bostashvili & Ujhelyi, 2019). Rogoff (1990), the seminal author of the theory of political-budgetary cycles, comments that the emergence of the cycle is due to the need to signal the powers or preferences of the governor to the voter before the elections; that is, it uses the composition of the fiscal budget as a signaling tool (Garcia & Hayo, 2021).

Cipullo and Reslow (2022) advocate that due to the lack of sufficient information for voters, the incumbent politician may try to increase his probability of reelection. Therefore, according to Bonfatti and Forni (2019), the term "political-budgetary cycles" generally refers to increases in spending and tax reductions in pre-election or election years. In addition, among the many political motivations that drive political-budgetary cycles, perhaps the main one is the reelection ambition (of a politician or party) (Klein & Sakurai, 2015).

2.2.1 Theory of Political-Budget Cycles and Fiscal Management

Fiscal management is among the tools available and susceptible to political influence (Bartoluzzio & Anjos, 2020). In this context, many countries have adopted fiscal rules to contain the deficit and debt management (Bonfatti & Forni, 2019). Along these lines, and relating to the LRF, Arvate, et al. (2008) comment that more than punishing public administrators, the LRF aims to correct the course of public administration in its various spheres, as well as to limit expenditures on revenues. Such objectives should be achieved by adopting planning, organization, internal and external control techniques, and transparency in the government's fiscal actions with the population.

According to Silva and Freire (2021), the adherence of the LRF in federative entities is intended to increase fiscal discipline and reduce the opportunistic behavior of representatives. This same thought is highlighted by Morais et al. (2019) when they comment that the tax rules on the Personnel Expenditure Index, for example, represent limiting factors to political manipulations.

In this context and from a political perspective, the adoption of fiscal rules by the central government over the subnational government (states and municipalities) imposed costs on those who did not comply with the policies determined in norms (Silva & Freire, 2021). Moreover, for the reasons explained

above, fiscal rules reduce the degree of freedom and fulfill their role of determining the restrictions of preferred spending for party power and allow spending to occur in favor of society in general (Silva & Freire, 2021).

It is generally considered that existing incentives for signaling competence and lack of voter information are factors related to the theory of political-budget cycles that increase the prevalence of political budget cycles (Aaskoven, 2018). Thus, the presence of fiscal rules would inhibit the presence of manipulation carried out by politicians (Bonfatti & Forni, 2019). In addition, without asymmetric information, political-budget cycles do not affect voter preferences or are ineffective (Wiguna & Khoirunurrofik, 2021).

In political-budget cycle models, election year spending differs from others because politicians try to convey information to voters through their policy choices (Bostashvili & Ujhelyi, 2019). For example, Gootjes et al. (2020) verified whether fiscal rules constrain policy-budget cycles, analyzing 77 developing countries from 1984 to 2015. The authors found that strict fiscal rules dampen policy-budget cycles, which improves fiscal discipline and the importance of these rules. A similar result was found by Bonfatti and Forni (2019), reporting that they also limit politicians' incentives to spend more before elections.

Klein and Sakurai (2015) note that, in addition to the election year, the first term and reelection are also variables that affect fiscal manipulation. These authors tested the effects of term limits on opportunistic political-budgetary cycles in municipal elections in Brazil from 2001 to 2008 and compared differences in the fiscal behavior of first-term and second-term mayors who cannot be reelected. The results showed that first-term mayors, as elections approach, reduce local taxes, change budget composition, reduce expenditures and increase capital investments, providing strong evidence of significant electoral fiscal differences between first and second-term mayors.

Based on the previous, the following hypotheses are presented:

H1: The election year positively influences personnel expenses in Brazilian states.

H2: The governor change positively influences personnel expenses in Brazilian states.

H3: The governor's first electoral term positively influences personnel expenses in Brazilian states.

2.3 Party ideology

Party ideology and political cycles have been the subject of several studies (Arvate et al., 2008; Sakurai & Menezes-Filho, 2011; Araújo et al., 2016; Gonçalves et al., 2017; Potrafke, 2020). These evidenced the influence of ideology on budget management. The impact of party ideology on public spending and the size of the public sector are discussed considering the party approach. For this approach, politicians adopt policies that reflect the preferences of their supporters in response to the heterogeneous preferences of voters (Herwartz & Theilen, 2017).

Concerning ideological classification, the terms right and left in political science are used to designate different party ideologies that drive political movements (Gonçalves et al., 2017). In addition, the ideology of the governing coalition is measured through a continuous variable constructed from the opinion

of experts on the ideological placement of the parties in each country (Arvate et al., 2008).

The party's ideology is polarized into left and right, but there are also subdivisions: center, center-left, and center-right. However, for methodological reasons, the center-left and center-right subdivisions were not considered; that is, the part classified as center-left will now be classified as left and center-right as right (Araújo et al., 2016). In addition, Arvate et al. (2008) state that, from a theoretical point of view, in the ideological classification between left and right, the center is assumed as a residual category.

Regarding fiscal management, left-wing parties tend to influence the economy more through the state through expansionary fiscal and monetary policies (Potrafke, 2012). In contrast, right-wing parties tend to reduce the size of the state, as well as allocate resources in areas that favor the economic development of the region via private initiatives, such as investments in transport infrastructure and technological and industrial development (Pottrakke, 2012; Gonçalves et al., 2017). In this context, the last two study hypotheses were elaborated:

H4: The left-wing ideology, partisan spectrum of the elected governor, exerts a positive influence on personnel expenses in Brazilian states.

H5: The right-wing ideology, and partisan spectrum of the elected governor, negatively influences personnel expenses in Brazilian states.

The political parties that make up the party ideology are classified, according to Table 1, according to the study by Codato et al. (2018).

Table 1
Classification of political parties

Left	Center	Right
PC do B, PCB, PCO, PDT, PPL, PSB, PSOL, PSTU, PT	(P)MDB ₁ , PMN, PPS, PROS, PSDB, PV, PHS, PPS	PAN, PEN ₂ , PFL/DEM, PGT, PL, PR, PPB/PP ₃ , PRB, PRN, PRONA, PRP, PRTB, PSC, PSD*, PSD**, PSDC ₄ , PSL, PSN, PST, PT do B ₅ , PTB, PTC, PTN ₆ , SD

1 The Brazilian Democratic Movement Party – PMDB removed the "Party" from its nomenclature and started to use only "MDB" as an acronym at the end of 2017, as it was already doing under the military dictatorship. The requirement to use the name of "Party" and, therefore, the presence of the "P" in party acronyms was in force by law in Brazil from 1979 (LOPP 6.767, art. 5, §1) to its revocation in 1995 (LPP 9 096, article 15, item I). The 1979 legislation aimed to prevent voters from confusing political parties with other organizations and movements that use acronyms.

2 The National Ecological Party – PEN, which has always been linked to the neo-Pentecostal denomination Assembly of God, has been using the name "Patriot" since late 2017 when it intended to have federal deputy Jair Bolsonaro as a presidential candidate for the 2018 elections.

3 The "Progressive Party – PP" recently changed its name to "Progressists" in the first half of 2018.

4 The Christian Social Democratic Party – PSDC changed its name to "Christian Democracy" in the first half of 2018.

5 The Brazilian Labor Party – PT do B, dissidence from the PTB in the 1990s is a cluster of other small parties such as the PNT (Nationalist Workers' Party), incorporated in 1989, the PSU (United Socialist Party), incorporated in 1990, PASART (Agrarian Socialist Party and Labor

Renewal), incorporated in 1992, PNTB (Nationalist Party of Brazilian Workers), incorporated in 1992. Changed the legend's name to "Avante" at the end of 2017.

6 The National Labor Party – PTN changed its name to "Podemos" to host the candidacy of Senator Álvaro Dias in mid-2017.

Note: * extinguished in 2003; ** created in 2011

Note. Source: Retrieved from "Tipologia dos políticos de direita no Brasil: uma classificação empírica" from Codato et al. (2018), p. 875.

2.4 Previous studies

Arvate et al. (2008), in their study on the relationship between party ideology and the fiscal result of Brazilian states between 1986 and 2005, constructed an ideological variable to represent the ideology of the Executive and the Legislative. The authors found evidence that governments ideologically classified as right-wing produce better primary outcomes, mainly by increasing revenues. In line, the institutional changes introduced by the federal government in the 1990s influenced the relationship between ideology and the primary result: left-wing governments presented better fiscal results after the introduction of legislation that restructured their debts, as well as left-wing legislatures passed to support improvement in fiscal results after the adoption of the LRF.

Sakurai and Menezes-Filho (2011) sought evidence of opportunistic and partisan cycles by examining a sample of 2,500 Brazilian municipalities from 1989 to 2005. When testing the hypothesis that expenditure, revenue, and fiscal balance variables behave differently depending on the electoral cycle and the party ideology of the mayors, the results indicate that Brazil's political ideologies influence the municipal finances' behavior. Thus, the authors add that these results confirmed that there were opportunistic and partisan cycles in managing budgets in Brazilian municipalities after the end of the military government.

Araújo et al. (2016), in their study on the theory of political-economic cycles in Brazilian states from 1995 to 2008, found evidence of increased spending in electoral years and that this spending is adjusted in post-election years, demonstrating opportunistic behavior by governments. As for party ideology, the results show that spending by governments that have different party ideologies behave differently.

Gonçalves et al. (2017) evaluated whether political cycles and ideological bias significantly impact public resource allocation decisions in infrastructure investments in Brazilian states. Through a fixed-effects panel regression (2003-2014), the authors showed an influence of the electoral cycle when considering the existence of ideological differences interacting with electoral processes, in which left and center parties tend to invest more in infrastructure in pre-election periods. The authors contribute to the literature by showing that electoral cycles can be more influenced depending on the ruling party.

Dias et al. (2018) investigated the influence of public investments on the reappointment of mayors of municipalities between 2001 and 2012. Using logistic regression, the authors inferred that voters generally reward mayors who promote relative increases in public investments in the next election period. This result is consistent with the literature on political cycles and electoral behavior.

Morais et al. (2019) conducted a study in 1,016 Brazilian municipalities on the political factors conditioning the Personnel Consumption Expenditure Index (PCE) defined by the LRF. The authors found that the electoral year and the first electoral term positively influence the PCE. Still, fiscal rules on the PCE represent a limiting

factor to political manipulations. The results presented show consistent evidence of opportunistic behavior by public managers.

Bonfatti and Forni (2019) studied Italian municipalities on the presence of budget policy cycles in capital expenditures. Considering the subnational fiscal rule, the authors provide evidence that fiscal rules can limit the budget policy cycle. Thus, they conclude that municipalities subject to fiscal rules have more limited political cycles than municipalities not subject to fiscal rules.

Bartoluzzio and Anjos (2020) analyzed how electoral political incentives influence the fiscal management of Brazilian municipalities and their consequences on electoral results. The authors highlight two findings: (i) although there is an increase in investments, visible to the population and associated by the literature with favorable electoral results, the reappointed parties also have a more sustainable personnel structure and better liquidity conditions in the short term with performance leveraged in strategic periods, such as election years; and (ii) despite the parties with reappointment showing better levels of fiscal status in the three political cycles analyzed, in the post-election period the averages retract to levels lower than those achieved by the administration at the beginning of the first term. Thus, the authors conclude that although there is an indication of better fiscal conditions in election years, the signaling effect is reversed in the following year.

Silva and Freire (2021) verified the extent to which accounting gimmicks affect fiscal policies and the execution of social spending during electoral political cycles. With the adoption of logistic regression, the authors argue that their findings have partially corroborated the thinking of the new vision of social and electoral control and that the institution of the LRF has brought great advances to fiscal compliance.

Baldissera et al. (2020) analyzed the influence of socioeconomic, financial-budgetary, and political-electoral aspects on Brazilian local governments' active and passive transparency. Regarding the political aspects, the subject of interest in the present study, the authors state that parties more to the left favor an increase in public expenditure, while parties more to the right aim at budget reductions.

Finally, Baldissera and Araújo (2021) analyzed the influence of the electoral year, change of public manager, and electoral mandate on the indebtedness of Brazilian states. Comprising the years 2000 to 2016 and estimating regression of panel data, the authors conclude that there is no determination of indebtedness depending on the election year, change of manager, and electoral mandate; however, demographic and ideological aspects showed a significant relationship.

3 METHODOLOGICAL PROCEDURES

Information covering the period from 2011 to 2018 was collected from 26 Brazilian states to answer the research question that aims to analyze the influence of political-budgetary cycles and party ideologies on personnel expenses in Brazilian states with the effects of two electoral cycles with elections for governors. Regarding the interest in studying governors, we agree with Cahan (2019) and Potrafke (2020) when commenting that the previous literature paid little attention to state governments, indicating that these governments also decide on general government spending. Also, as highlighted in the introduction, this study complements analyzes of studies focusing on municipal governments.

The data were collected from the website of the Superior Electoral Court, where the candidates' party affiliations were consulted, and whether they were

running for reelection. Data on total personnel expenses, the main variable of interest, were collected by consulting the Fiscal Management Reports (FMR). Finally, the population data were collected from the website of the Brazilian Institute of Geography and Statistics (IBGE).

The dependent variable represents the natural logarithm of total personnel expenses for each Brazilian state in the respective analysis periods (GP_{it}). The reason for choosing Personnel Expenditure as the dependent variable is supported by previous studies that indicate that this expenditure is a key component of the economy and may change throughout the electoral period (Cahan, 2019; Morais et al., 2019).

For the LRF (Art. 18), total personnel expenses are understood to be the sum of expenses of the federation entity with active, inactive, and pensioners related to elective mandates, positions, functions or jobs, civil, military, and Power members, with any remuneration, such as salaries and benefits, fixed and variable, subsidies, retirement benefits, reforms, and pensions, including additional ones, bonuses, overtime and personal benefits of any nature, as well as social charges and contributions collected by the entity to social security entities. Personnel expenses data were deflated by the Broad Consumer Price Index (IPCA) to minimize possible effects of inflation in the period.

The independent variables are represented by a vector representing the political-budgetary cycles (electoral year, change of state governor, and first electoral term) and the left, center, and right political ideology. Table 2 describes the operational definition of the variables and the expected sign according to the hypotheses developed.

Table 2
Description of independent variables

Variable	Description	Expected Signal	Previous studies
Election year EY_{it}	assumes value 1 if it is an election year or 0 otherwise.	(+)	Arvate et al. (2008); Morais et al. (2019); Silva e Freire (2021).
Change of State Governor CSG_{it}	takes the value 1 if the Governor is different from the previous year or 0 otherwise.	(+)	Queiroz (2018); Queiroz et al. (2019).
First electoral term FET_{it}	assumes value 1 if it is the Governor's first term or 0 otherwise.	(+)	Queiroz (2018); Morais et al. (2019); Queiroz et al. (2019).
Left Party Ideology LEFT_{it}	dummy that indicates whether the governor's party is left-wing.	(+)	Arvate et al. (2008); Klein e Sakurai (2015); Balaguer-Coll et al. (2015); Gonçalves et al. (2017); Queiroz (2018); Queiroz et al. (2019);
Right Party Ideology RIGHT_{it}	dummy that indicates whether the governor's party is right-wing.	(-)	Baldissera et al. (2020); Silva e Freire (2021).
Population POP_{it}	Natural logarithm of the population of the federation entity.		Balaguer-Coll et al. (2015), Dias et al. (2018), Queiroz (2018); Morais et al. (2019).

Note: Parties classified as Center represent the base group and are captured by the model constant.

Source: Adapted from the study by Morais et al. (2019) and Queiroz et al. (2019). The study used the population variable (POP_{it}) as a control variable.

The following econometric model was formalized to verify the influence of political-budgetary cycles and political ideology, measured by the variables described in Table 2, on personnel expenditure in Brazilian states:

$$DP_{it} = \beta_0 + \beta_1 EY_{it} + \beta_2 CSG_{it} + \beta_3 FET_{it} + \beta_4 LEFT_{it} + \beta_5 RIGHT_{it} + \beta_6 POP_{it} + \varepsilon_{it}$$

The parameters were estimated using panel data with fixed effects. For this, the tests of Breusch-Pagan, Hausman (Fávero & Belfiore, 2017) were used. The assumption of the absence of multicollinearity was analyzed through the analysis of the correlation matrix and by the VIF (variance inflation factor) test, where no problems of multicollinearity were reported, as it presented values below 10, that is, within the limits of normality (Fávero & Belfiore, 2017). Heteroscedasticity robust estimators (Wald test) and autocorrelation were employed using cluster correction (id). Also, the Shapiro-Wilk test was performed; according to Fávero and Belfiore (2017), the Shapiro-Wilk test can be applied to samples of size $4 \leq n \leq 2,000$ to meet the assumption of normality. The results obtained by the test do not reject the null hypothesis, presenting a normal distribution at a 5% significance level.

4 RESULTS AND DISCUSSIONS

4.1 Descriptive Analysis

Table 3 summarizes the sample's descriptive statistics and the parametric Student's t-test for comparing two samples.

Table 3
Descriptive statistics of variables of interest by groups

Election Year			
Item	Election Years	Non-Electoral Years	p-value
Average	23,3638	23,2068	0,0086
Standard deviation	0,8889	0,8935	
Change of State Governor			
Item	Same Governor	Different Governor	p-value
Average	23,2970	23,0254	0,6164
Standard deviation	0,8932	0,8680	
First Electoral Term			
Item	First Term	Second Term	p-value
Average	23,1486	23,5107	0,0000
Standard deviation	0,8639	0,9241	
Party Ideology			
Item	Left	Right	p-value
Average	23,1043	22,9453	0,0004
Standard deviation	0,7632	0,6752	

Note: The p-value represents the probability value for the type 1 error of a Student's t-test statistic. The Shapiro-Wilk normality test and Levene's homoscedasticity test were performed

and showed that the data tend to have a normal distribution and the variances are homogeneous, which allows the analysis of the mean difference through parametric tests such as the t-test of the student.

The electoral year variable comprises two electoral years (2014 and 2018) and presents 52 observations for electoral years and 156 observations for non-electoral years, comprising the eight years multiplied by 26 states. It is observed that the electoral years have a higher average of Personnel Expenses, and this difference (t-test) is statistically significant at the level of 1%.

As for the change of governor, of the 208 observations, there were changes of governors only in 18.75% (n=39), while in 80.25% of the states, they remained the same. In addition, it is observed that the average Personnel Expenditure is higher in states where no governors change. However, it is possible to observe, and according to the t-test, there is no evidence of a statistically significant difference between the averages of Personnel Expenses of Brazilian states with a change of governor.

In the First Electoral Term panel, the means and standard deviations of Personnel Expenditure in the states where the governors exercised only the first electoral term are presented. In this situation, they presented a lower average, and this difference was statistically significant.

In the Party Ideology panel, the averages of Personnel Expenditure are shown. It is observed that parties classified as right have a lower average of Personnel Expenses, which is statistically significant at 1%.

4.2 Econometric Model

The influence of political-budgetary cycles (represented by the variables electoral year, change of governor, first electoral term, and party ideology on personnel expenses) is described in Table 4.

Table 4
Regression results

Dependent Variable	Personnel Expense
Election Year (EY)	-0,03330*** (0,00934)
Change of State Governor (CSG)	0,06064*** (0,00996)
First Electoral Term (FET)	0,0498 (0,0299)
Left Party Ideology (LEFT)	0,05031 (0,05617)
Right Party Ideology (RIGHT)	-0,10812* (0,03908)
Population (POP)	3,78723*** (0,38862)
Constant	-34,9282***

	(5.96779)
<i>R2 within</i>	0,7482
<i>R2 between</i>	0,9084
<i>R2 overall</i>	0,8850
Comments	208
No. of States	26

Note. Fixed Effects (FE). Standard errors are reported in parentheses. ***, **, * indicate significance at the level of 1%, 5% and 10%, respectively. Regarding R2, the model explains about 74.82% (within) of the variation in Personnel Expenses.

From the evidence presented in table 4, negative and significant associations can be verified between the variables electoral year and right-wing party ideology with the variable of interest. Still, it was possible to demonstrate significance and positive association of the variable change of state governor. While the variables first electoral term and left-wing party ideology did not show statistical significance.

Concerning the election year variable, the results indicate that this variable harms state personnel expenses and presents the highest average (Table 3); given this, research hypothesis H1 is rejected. Such evidence diverges from the findings of Arvate et al. (2008), Araújo et al. (2016), and Morais et al. (2019). Thus, in addition to not adhering to the foundations of the Political Cycles Theory, the evidence converges to the diametrically opposite effect in electoral years, reducing personnel expenses. Just as one cannot agree with Bartoluzzio and Anjos (2020) when commenting that the increase in public spending can be manipulated at strategic moments to signal competences to voters, which in this case would be the election year.

However, this result may explain why tax rules on Personnel Expenses (Morais et al., 2019) are generating the expected results. Furthermore, the present interpretation is supported by the results of Gootjes et al. (2020) when they demonstrate that strict fiscal rules dampen political-budget cycles, which improve fiscal discipline and the importance of these rules.

For the variable Change of State Governor, there is a significant positive relationship with Personnel Expenses, not rejecting Hypothesis 2. This result is in line with Queiroz (2018). Thus, it is recalled that a change in manager is accompanied by an increase in the composition of public expenditures subject to change, among them personnel expenses (Queiroz, 2018, p. 75). However, the finding does not corroborate Morais et al. (2019), when their results indicated a negative and significant influence for the analyzed municipalities, and with Baldiserra and Araújo (2021). They agree that a newly elected manager can take considerable time to change the composition of expenditures.

Regarding the First Electoral Mandate, the results do not show a significant positive influence; therefore, H3 is rejected. This result contrasts with Klein and Sakurai (2015) and Morais et al. (2019) when they report that managers in their first term have a higher PGI compared to those in a second term. According to Klein and Sakurai (2015), to be reelected, managers in their first term prioritize reducing local taxes and budget expenses, as well as giving preference to increasing capital investments. Furthermore, when they are already reelected, these authors highlight their opportunistic behavior according to the theory of political-budgetary cycles.

Still on the variable First Electoral Mandate, the results are in line with Queiroz (2018) when they highlight that the variable first electoral mandate (FEM) does not have a significant influence on the dependent variable Index of Change in the Composition of Public Expenditures (ICCPE). According to the interpretation of Queiroz (2018), governors in their first term do not make major changes in the composition of expenditures concerning governors in their second term. Given the above, we comment on one more item that acts to weaken the foundations of the theory of political cycles.

Regarding the variables of influence of Party Ideology on Personnel Expenditure, only the right-hand variable showed statistical significance. Because of this, hypothesis H4 is rejected, and hypothesis H5 is not denied, as it meets the expected sign. Thus, we agree with Sakurai and Menezes-Filho (2011) when they report that political ideologies in Brazil influence, in part, the behavior of public finances.

For this discussion, Araújo et al. (2016) and Gonçalves et al. (2017) agree that party influence on spending varies according to party ideology. Also, the study by Sakurai and Menezes-Filho (2011) is rescued when they indicate that the political ideologies of Brazil, in part, influence the behavior of municipal finances, confirming the occurrence of opportunistic and partisan cycles in the management of municipal budgets. Brazilians.

Regarding parties with a left-wing party ideology, Potrafke (2012) states that, when it comes to fiscal management, left-wing parties will tend to influence the economy more through the State, favoring more intervention, more income redistribution, and fiscal and monetary policies.

For the left-party ideology variable, the result of this study is in line with Queiroz (2018). Noting that the present variable does not influence changes in the composition of expenditures; however, it does not align with those mentioned earlier concerning the right-party ideology variable.

Regarding the right-wing party ideological variable, which harms personnel expenses, the study's findings corroborate the results of Arvate et al. (2008), when they demonstrate that the right-wing party ideology produces better primary results, mainly by increasing revenues and following minimum spending assumptions, given the lower state intervention in the economy. Nevertheless, because of the ideological variables exposed, the discussion about party ideologies is instigated, citing Baldissera et al. (2020) when reporting that parties more to the left favor increased public spending, while those more to the proper aim for budget reductions.

Regarding the control variable Population, there is statistical significance at the 1% level. According to Morais et al. (2019), the larger the population, the higher the Personnel Expenditure Index. In summary, the analyzes corroborate Bonfatti and Forni (2019) and Gootjes et al. (2020), demonstrating that strict fiscal rules dampen political-budget cycles, which improve fiscal discipline and the importance of these rules.

5 FINAL CONSIDERATIONS

This study aimed to analyze the influence of political-budgetary cycles, represented by the variables electoral year, change of governor, first electoral term, and party ideology on personnel expenses in Brazilian states. Fiscal information from 2011 to 2018 was used to achieve this objective, comprising two electoral cycles made available by the Brazilian Institute of Geography and Statistics (IBGE) of the 26 states.

Based on the results obtained by the data regression technique in panel using fixed effects, there was a significant negative influence on the electoral year. According to this evidence, the present study does not align with the foundations of the Political Cycles Theory when it says that in electoral years there is greater management of fiscal variables.

Another negative influence concerns right-wing party ideology, corroborating other authors who concluded that the influence on spending varies according to party ideology. Finally, the variables Change of Governor and Population are mentioned regarding the positive and significant influences.

Regarding the variable first electoral term, there was no significant positive influence. However, it is in line with other discussions that justify that governors who are in their first term do not make major changes in the composition of expenditures concerning governors who are in their second term, promoting in yet another limiting point of the sayings of the theory of political cycles. Therefore, in the light of the Political Cycles theory, the results sometimes converge with the discussions, and sometimes they present limiting points. However, from the above, it is understood that these results can justify carrying out new studies.

Moreover, the results allow us to judge that adopting fiscal rules, such as the Fiscal Responsibility Law and the attempt to avoid management by managers, generates expected results, limits managers' opportunistic actions, and controls public accounts. In this way, it is expected that, in theory, there will be a weakening of the presence of political manipulations and, consequently, a weakening of political cycles.

As limitations of the study, we highlight the time of two political cycles and the non-inclusion, due to lack of updating, of other sociodemographic and population variables that may impact the variable of interest. Therefore, it is suggested that future studies use a period that analyzes a greater number of electoral cycles of state and presidential elections, the inclusion of variables that aim to deepen the analyzed phenomenon, for example, per capita income and detailing by regions, as well as, survey through questionnaires, whether the adoption of fiscal policies influences one's voting decision.

REFERENCES

- Aaskoven, L. (2018). Polity age and political budget cycles: Evidence from a Danish municipal reform. *European Journal of Political Economy*, 52, 75-84. <https://doi.org/10.1016/j.ejpoleco.2017.05.002>

- Alesina, A., & Paradisi, M. (2017). Political budget cycles: Evidence from Italian cities. *Economics & Politics*, 29(2), 157-177. <https://doi.org/10.1111/ecpo.12091>
- Araújo, J. M., Leite Filho, P. A., & Reisj, F. A. (2016). Party ideology and elections: an analysis of political-economic cycles in Brazilian states. *Revista ESPACIOS* | Vol. 37 (Nº 13) Año 2016. <https://www.revistaespacios.com/a16v37n13/16371323.html>
- Arvate, P. R., Avelino, G., & Lucinda, C. R. (2008). Existe Influência da Ideologia sobre o Resultado Fiscal dos Governos Estaduais Brasileiros? *Est. Econo.*, 38(4), 789–814. <https://doi.org/10.1590/S0101-41612008000400004>
- Balaguer-Coll, M. T., Brun-Martos, M. I., Forte, A., & Tortosa-Ausina, E. (2015). Local governments' re-election and its determinants: new evidence based on a Bayesian approach. *European Journal of Political Economy*, 39, 94-108. <https://doi.org/10.1016/j.ejpoleco.2015.04.004>
- Baldissera, J. F., Dall'Asta, D., Casagrande, L. F., & Oliveira, A. M. B. D. (2020). Influência dos aspectos socioeconômicos, financeiro-orçamentários e político-eleitorais na transparência dos governos locais. *Revista de Administração Pública*, 54(2), 340-359. <https://doi.org/10.1590/0034-761220190048>
- Bartoluzzio, A. I. S. D. S., & Anjos, L. C. M. D. (2020). Ciclos Políticos e Gestão Fiscal nos Municípios Brasileiros. *Revista de Administração Contemporânea*, 24(2), 167-180. <https://doi.org/10.1590/1982-7849rac2020190190>
- Bonfatti, A., & Forni, L. (2019). Fiscal rules to tame the political budget cycle: Evidence from Italian municipalities. *European Journal of Political Economy*. <https://doi.org/10.1016/j.ejpoleco.2019.06.001>
- Bostashvili, D., & Ujhelyi, G. (2019). Political budget cycles and the civil service: Evidence from highway spending in US states. *Journal of public economics*, 175, 17-28. <https://doi.org/10.1016/j.ejpoleco.2019.06.001>
- Cahan, D. (2019). Electoral cycles in government employment: Evidence from US gubernatorial elections. *European Economic Review*, 111, 122-138. <https://doi.org/10.1016/j.euroecorev.2018.09.007>
- Calderini, S. R. (2011). *Três ensaios sobre o gasto local no Brasil: descentralização, eficiência e voto* (Doctoral dissertation). <http://hdl.handle.net/10438/8548>
- Castro, V., & Martins, R. (2018). Politically driven cycles in fiscal policy: In depth analysis of the functional components of government expenditures. *European Journal of Political Economy*, 55, 44-64. <https://doi.org/10.1016/j.ejpoleco.2017.11.003>
- Cipullo, D., & Reslow, A. (2022). Electoral cycles in macroeconomic forecasts. *Journal of Economic Behavior & Organization*, 202, 307-340. <https://doi.org/10.1016/j.jebo.2022.08.016>
- Codato, A., Berlatto, F., & Bolognesi, B. (2018). Tipologia dos políticos de direita no Brasil: uma classificação empírica. *Análise Social*, (229), 870-897. <https://doi.org/10.31447/as00032573.2018229.02>

Constituição da República Federativa do Brasil: Promulgada em 5 de outubro de 1988. (1988) Brasília (DF): Senado Federal: Centro Gráfico.
http://www.planalto.gov.br/ccivil_03/constituicao/constituicao.htm

Dias, B. P., Nossa, V., & Monte-Mor, D. S. (2018). O investimento público influencia na reeleição? Um estudo empírico nos municípios do estado do Espírito Santo. *Revista de Administração Pública*, 52(5), 880-898.
<https://doi.org/10.1590/0034-7612172594>

Downs, A. (1957). An economic theory of political action in a democracy. *Journal of political economy*, 65(2), 135-150.
<https://www.jstor.org/stable/1827369>

Fávero, L. P., & Belfiore, P. (2017). *Manual de análise de dados: estatística e modelagem multivariada com Excel®, SPSS® e Stata®*. Elsevier Brasil.

Filipe, C., dos Santos, A. C., Junior, M. M. R., & da Silva Zonatto, V. C. (2019). Características políticas e desempenho financeiro público sob a luz da teoria dos ciclos políticos. *Contextus: Revista Contemporânea de economia e gestão*, 17(1), 127-144. <https://doi.org/10.19094/contextus.v17i1.33608>

Fukumoto, K., Horiuchi, Y., & Tanaka, S. (2020). Treated politicians, treated voters: A natural experiment on political budget cycles. *Electoral Studies*, 67, 102206.
<https://doi.org/10.1016/j.electstud.2020.102206>

Gadelha, S. R. D. B. (2011). Análise dos impactos da Lei de Responsabilidade Fiscal sobre a despesa de pessoal e a receita tributária nos municípios brasileiros: um estudo com modelo probit aplicado a dados em painel. *Revista Brasileira de Economia de Empresas*, 11(1).
<https://portalrevistas.ucb.br/index.php/rbee/article/view/3106>

Garcia, I., & Hayo, B. (2021). Political budget cycles revisited: Testing the signalling process. *European Journal of Political Economy*, 102030.
<https://doi.org/10.1016/j.ejpoleco.2021.102030>

Gonçalves, L. G., Funchal, B., & Bezerra Filho, J. E. (2017). A influência dos ciclos políticos nos investimentos públicos em infraestrutura: um estudo nos estados brasileiros no período de 2003 a 2014. *Revista de Administração Pública*, 51(4), 462-481. <https://doi.org/10.1590/0034-7612156337>

Gootjes, B., & de Haan, J. (2022). Do fiscal rules need budget transparency to be effective?. *European Journal of Political Economy*, 102210.
<https://doi.org/10.1016/j.ejpoleco.2022.102210>

Gootjes, B., de Haan, J., & Jong-A-Pin, R. (2020). Do fiscal rules constrain political budget cycles?. *Public Choice*, 1-30. <https://doi.org/10.1007/s11127-020-00797-3>

Herwartz, H., & Theilen, B. (2017). Ideology and redistribution through public spending. *European Journal of Political Economy*, 46, 74-90.
<https://doi.org/10.1016/j.ejpoleco.2016.11.002>

- 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. <https://doi.org/10.1016/j.ejpoleco.2014.10.008>
- Lei Complementar nº 101, de 4 de maio de 2000. Estabelece normas de finanças públicas voltadas para a responsabilidade na gestão fiscal e dá outras providências. *Diário Oficial da União*. http://www.planalto.gov.br/ccivil_03/leis/lcp/lcp101.htm
- Martinez, L. (2009). A theory of political cycles. *Journal of Economic Theory*, 144(3), 1166-1186. <https://doi.org/10.1016/j.jet.2008.10.006>
- Martinez-Vazquez, J., Lago-Peñas, S., & Sacchi, A. (2017). The impact of fiscal decentralization: A survey. *Journal of Economic Surveys*, 31(4), 1095-1129. <https://doi.org/10.1111/joes.12182>
- Morais, L. M. F., Queiroz, D. B., & Sousa, R. G. (2019). Ciclo Político no Índice de Gasto com Pessoal: Uma Análise no Contexto Brasileiro. *Sociedade, Contabilidade e Gestão*, 14(1), 76-90. https://doi.org/10.21446/scg_ufrj.v0i0.16861
- Nordhaus, W. D. (1975). The political business cycles. *Review of Economic Studies*, 42 (2), 169-190. <https://doi.org/10.2307/2296528>
- Philips, A. Q. (2020). Just in time: Political policy cycles of land reform. *Politics*, 40(2), 207-226. <https://doi.org/10.1177/0263395719859459>
- Pires, M. (2019). Uma análise da regra de ouro no Brasil. *Revista Brasileira de Economia Política*, 39 (1), 39-50. <https://doi.org/10.1590/0101-35172019-2896>
- Potrafke, N. (2012). Political cycles and economic performance in OECD countries: empirical evidence from 1951–2006. *Public Choice*, 150(1-2), 155-179. <https://www.jstor.org/stable/41406873>
- Potrafke, N. (2020). General or central government? Empirical evidence on political cycles in budget composition using new data for OECD countries. *European Journal of Political Economy*, 63, 101860. <https://doi.org/10.1016/j.ejpoleco.2020.101860>
- Queiroz, D. B. (2018). Influência do Ano Eleitoral, da Mudança de Gestor Público e do Mandato Eleitoral sobre mudanças na composição dos gastos públicos nos Estados Brasileiros. *REUNIR Revista De Administração Contabilidade E Sustentabilidade*, 8(3), 68-77. <https://doi.org/10.18696/reunir.v8i3.789>
- Queiroz, D. B. de, Morais, L. M. F. de, Souza, A. G. S. F. de, & Silva, V. K. R. da. (2019). Mandatos Eleitorais e Ciclos Político-Orçamentários: Evidências dos Estados Brasileiros. *Administração Pública E Gestão Social*, 11(2), 232-250. <https://doi.org/10.21118/apgs.v11i2.5492>
- Rogoff, K. (1990). Equilibrium political budget cycles. *The American Economic Review*, 80 (1), 21-26. <https://www.jstor.org/stable/2006731>

- Sakurai, S. N., & Menezes-Filho, N. (2011). Opportunistic and partisan election cycles in Brazil: new evidence at the municipal level. *Public Choice*, 148(1-2), 233-247. <https://doi.org/10.1007/s11127-010-9654-1>
- Silva, N. O. & Freire, F. S. (2021). Gastos Sociais e Accounting Gimmicks: Uma Percepção dos Ciclos Políticos Eleitorais nos Municípios do Centro-Oeste Brasileiro. *Contabilidade Vista & Revista*, 32(1), 218-246. <https://doi.org/10.22561/cvr.v32i1.5976>
- Wiguna, G. E., & Khoirunurrofik, K. (2021). Political budget cycle patterns and the role of coalition parties in shaping Indonesian local government spending. *Asia-Pacific Journal of Regional Science*, 5(1), 41-64. <https://doi.org/10.1007/s41685-020-00186-0>

AUTHORS' CONTRIBUTIONS

Contributions	Tadeu Junior de Castro Gonçalves	Edna Maria da Silva Medeiros de Oliveira	Gessiane da Silva Paulino	Severino Cesário de Lima	Anderson Luiz Rezende Mól
1. Idealization and conception of the research subject and theme	✓	✓	✓	✓	
2. Definition of the research problem	✓	✓	✓	✓	
3. Development of Theoretical Platform	✓	✓		✓	
4. Design of the research methodological approach	✓	✓	✓	✓	✓
5. Data collection	✓	✓		✓	✓
6. Analyses and interpretations of collected data	✓				
7. Research conclusions	✓			✓	✓
8. Critical review of the manuscript	✓			✓	✓
9. Final writing of the manuscript, according to the rules established by the Journal.	✓			✓	✓
10. Research supervision	✓			✓	✓