

The impacts of the state-owned enterprises law on the Brazilian stock market

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Abstract

Purpose – This study examines how the Brazilian stock market reacts to pivotal events related to the State-Owned Enterprises Law, including both governance-enhancing milestones and regulatory relaxations. It investigates whether ownership structure, governance levels, and listing segments influence investor responses.

Theoretical framework – Rooted in agency theory, the study explores how principal-agent conflicts, particularly in politically influenced state-owned enterprises, can affect firm performance and market behavior. The State-Owned Enterprises Law aimed to mitigate such inefficiencies through governance reforms.

Design/methodology/approach – We apply an event study methodology and difference-in-differences (DID) techniques to analyze the abnormal stock returns of 107 B3-listed companies during four pivotal events related to the State-Owned Enterprises Law, encompassing both its enactment and its subsequent weakening.

Findings – The results reveal positive cumulative abnormal returns (CARs) following governance-enhancing events, suggesting market confidence in improved oversight and reduced political interference. Conversely, events signaling a rollback of the law's provisions, particularly the day the Chamber of Deputies approved the 2022 bill easing board appointment criteria, generated negative CARs, indicating concerns over transparency and governance quality.

Practical & social implications of the research – The findings highlight the sensitivity of asset prices to governance regulations in emerging markets. They reinforce the importance of institutional safeguards in reducing agency conflicts and protecting investor interests in state-owned enterprises.

Originality/value – This study contributes to the limited empirical literature on how Brazilian capital markets interpret corporate governance reforms. It offers new evidence on the roles of regulation, ownership structure, and governance quality in shaping market dynamics.

Keywords: Financial performance, corporate governance, capital markets, event study.

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How to cite:

Souza, V. G., Barbedo, C. H. S., Simões, J. J. F. (2025). The impacts of the state-owned enterprises law on the Brazilian stock market. *Revista Brasileira de Gestão de Negócios*, 27(4), e20240199. <https://doi.org/10.7819/rbgn.v27i4.4322>

Received on:

Nov/13/2024

Approved on:

Oct/27/2025

Responsible editor:

Prof. Dr. Joelson Sampaio

Reviewers:

Humberto Galucci Netto;

Isac Brandão

Evaluation process:

Double Blind Review

This article is open data



Revista Brasileira de Gestão de Negócios

<https://doi.org/10.7819/rbgn.v10.7819/rbgn.v27i4.4322>

I Introduction

Since the early 2010s, Brazil has been plagued by a series of scandals involving fraud and corruption within its major state-owned enterprises (SOEs), notably Petrobras. These scandals have exposed widespread misconduct in various state-controlled companies, revealing instances of abuse of power by managers and pervasive political party influence in decision-making processes related to investment plans and pricing strategies (Oliveira et al., 2020; Simões et al., 2021). These revelations have underscored significant weaknesses and inefficiencies in the integrity, compliance, and anti-corruption mechanisms within Brazilian SOEs.

In response to the significant market and societal backlash, as well as the need to strengthen the institutional framework in Brazil, the federal government enacted Law No. 13,303/2016 on June 30, 2016. Commonly referred to as the State-Owned Enterprises Law, its primary aim was to elevate corporate governance standards within Brazilian SOEs. By delineating explicit guidelines for corporate governance, bidding procedures, and contracts, the law aimed to promote transparency, compliance, risk management, and internal control within these entities. For instance, the law limits the possibility of political patronage on SOE boards of directors, requires transparency regarding the costs of policy objectives, and mandates the creation of a fiscal council and an audit committee (Organisation for Economic Co-operation and Development, 2020).

SOEs wield considerable influence in Brazil due to their substantial assets and economic significance at the federal level. Moreover, their historical role in shaping the national development model has left an indelible mark on the social, economic, and political landscape (Fontes Fo., 2018). Socially, these enterprises play a pivotal role in job creation and personnel policies, often offering conditions that surpass market standards and serving as guiding forces within their respective sectors. Economically, they serve as vital revenue sources for governments through dividend distribution, bolstering sectors and development initiatives, and making strategic investments. Politically, they are prominent stakeholders in political compositions and negotiations, influencing the formation of power coalitions.

On December 13, 2022, with the change of government, a bill was approved in the Chamber of Deputies that aims to amend Law No. 13,303 of June

30, 2016, also known as the State-Owned Enterprises Law. The bill seeks to relax prohibitions regarding the appointment of individuals to the board of directors of SOEs and ease criteria for spending on advertising and sponsorship by public companies, mixed-capital companies, and their subsidiaries. However, this move contradicts the widely-held international consensus established in the 2019 OECD Recommendation of the Council on Guidelines on Anti-Corruption and Integrity in State-Owned Enterprises (ACI Guidelines) (Organisation for Economic Co-operation and Development, 2019) and the 2015 OECD Guidelines on Corporate Governance of State-Owned Enterprises (Organisation for Economic Co-operation and Development, 2015). By going against international best practices in SOE governance, the amendment to the State-Owned Enterprises Law will diminish the transparency and efficiency of these companies and potentially reintroduce political patronage practices in SOEs. Within this context, the following research question arises: How did the Brazilian stock market respond to pivotal events associated with the State-Owned Enterprises Law?

The primary objective of our study is to analyze how companies listed on the B3 stock exchange reacted to four key events associated with the State-Owned Enterprises Law. These events range from positive legislative milestones to regulatory relaxations. By employing the event study methodology and difference-in-differences (DID) techniques, we will examine the relationships between governance structures, policy announcements, and corporate governance levels within B3 listing segments, as well as their influence on stock returns during these critical events. Additional objectives consist of verifying the following: (i) whether the governance structure (public vs. private ownership) influences the stock returns of these companies in response to the events; (ii) how these companies react to different policy announcements; and (iii) how stock returns vary among these companies across different B3 listing segments in relation to corporate governance levels.

Recent empirical studies on Brazilian SOEs offer important context for this investigation. Orso et al. (2023) show that politically connected events tend to elicit more pronounced negative reactions in SOE stock prices compared to non-SOEs, particularly when the government holds controlling stakes. Similarly, Silva et al. (2021) find that SOE boards are generally less independent and more prone to CEO dominance, which may reduce their monitoring effectiveness and increase the potential for earnings management.

This supports the notion that SOE governance structures differ in ways that affect market valuation.

In contrast, more recent studies suggest that the State-Owned Enterprises Law may be driving governance improvements. Brandão et al. (2023) demonstrate that SOEs have increasingly adopted independent boards and internal control mechanisms, particularly in response to regulatory requirements. Brandão (2024) further highlights how ownership structure shapes both the design and perception of governance systems, either as monitoring tools or, in some cases, as expropriation mechanisms. Together, these studies reinforce the relevance of examining how market participants evaluate governance changes in SOEs and the role played by institutional reforms like the State-Owned Enterprises Law.

This study makes two main contributions to the existing literature. First, it expands the relatively limited body of empirical evidence on how the Brazilian stock market responds to legislative and regulatory events surrounding the State-Owned Enterprises Law. Second, it adds to the broader corporate governance and financial economics literature by linking governance reforms to asset pricing and firm performance. By distinguishing between public and private ownership structures, as well as different B3 listing segments, the analysis underscores how governance quality and institutional context shape market reactions to policy changes.

Based on these contributions, this paper provides event-based evidence on how investors price governance-related announcements and regulatory shifts, offering insights into the credibility and market relevance of governance reforms in emerging economies, particularly in contexts of ongoing institutional and political change. Our findings revealed statistically significant positive cumulative abnormal returns (CARs) during positive events, such as the approval and enactment of the State-Owned Enterprises Law, indicating market optimism and potential wealth creation. Conversely, negative events, particularly the day the Chamber of Deputies approved a change easing criteria for the State-Owned Enterprises Law, led to substantial negative CARs, highlighting concerns about transparency and efficiency in SOE governance. We observed differential impacts of positive events across corporate governance levels. Lower governance segments experienced more pronounced positive effects, showcasing the importance of robust governance practices in mitigating risks and fostering investor confidence in SOEs. However, higher governance segments exhibited vulnerability during negative events despite stringent regulations.

The remainder of this paper proceeds as follows: Section 2 presents the literature review. Section 3 describes the methodology. Section 4 presents the empirical results and analyses. The final section presents the main conclusions.

2 Literature review

2.1 Agency theory

Pioneered by Coase (1937), Jensen and Meckling (1976), and Fama and Jensen (1983a, 1983b), agency theory provides a framework for examining the dynamics between principals and agents, namely, the ownership and control of the firm. In this context, principals (shareholders), who oversee the company from a distance, delegate decision-making authority to agents (managers), who operate within the company on a daily basis and act on the principals' behalf. However, conflicts of interest often arise between principals and agents due to differing goals, risk preferences, and information asymmetry. These misalignments often manifest as disputes over strategic choices, resource distribution, executive appointments, and other aspects of corporate governance. The central aim of agency theory is to understand and address these conflicts of interest inherent in principal-agent relationships.

Musacchio et al. (2015) delineate three principal-agent conflicts within the governance framework of SOEs, suggesting a detrimental impact of state intervention on firm-level economic performance. The first conflict arises from managerial agency, wherein agents prioritize their personal interests over those of the principals they represent, leading to agency costs. SOE managers and board members, who are often appointed for political reasons rather than based on merit, may lack incentives to scrutinize and oppose inefficient decisions imposed by the ruling political coalition. Consequently, political interference in managerial decisions can compromise the autonomy and efficacy of professional managers, while managerial resistance to political mandates may trigger retaliation or dismissal.

The second issue pertains to the social view, wherein governmental directives may steer SOEs toward fulfilling social objectives rather than prioritizing firm efficiency, profitability, and long-term viability. Political authorities, acting on behalf of the government or other state entities, might aim to shape SOE operations to achieve political goals, such as fostering job creation, promoting regional development, or maintaining low inflation.

In the social view, SOEs may exhibit inefficiencies due to their tendency to pursue projects with a negative private net present value but a positive social net present value.

The third conflict arises from the political perspective that politicians overseeing SOEs may exploit these entities for immediate political gain, thereby diminishing private investors' return on capital. Governments can exert significant influence over the behavior of SOE boards by directly appointing directors aligned with their political agendas, thereby adversely affecting the management and subsequent performance of these firms. Consequently, SOEs may be more inclined to approve suboptimal investments and utilize public resources and protections for purposes other than the inherent financial viability of their projects. Essentially, the political perspective attributes SOE inefficiency to their propensity to undertake projects with negative private value, or even negative or limited social value, in exchange for political gains for the politicians involved.

2.2 Empirical evidence on the impact of corporate governance legislation

Corporate governance improvements are widely recognized for their significant impact on the economic and financial performance of companies, as extensively documented in the corporate finance literature. For example, Kroszner and Rajan (1995) examined the 1933 Glass-Steagall Act, which prohibited U.S. commercial banks from underwriting and dealing in corporate securities. A conflict of interest between owner-managers and debt holders arises when lending and underwriting are consolidated within the same structure. This consolidation led opportunistic commercial banks to systematically deceive naive investors into purchasing low-quality securities. Their results suggest that internal structure serves as an effective commitment mechanism, as issues underwritten through affiliates yielded higher returns compared to those underwritten through internal department structures. They also find a positive correlation between the improvement in pricing and the fraction of independent directors on the affiliate's board.

Jain and Rezaee (2006) studied the capital-market reaction to the Sarbanes-Oxley Act of 2002 in the U.S., which was enacted in response to numerous corporate and accounting scandals in corporate America. They observed positive abnormal returns during legislative events that increased the probability of the Act's enactment and negative abnormal returns during events that decreased this

likelihood. This suggests that the law's benefits outweigh its compliance costs, leading to wealth accumulation. Additionally, their findings indicate that firms that exhibited higher levels of compliance prior to the Act's enactment received a more favorable market response.

Andriosopoulos et al. (2017) investigated the risk-return effects of the 2010 Dodd-Frank Act on U.S. financial institutions. The Act was a legislative attempt to restructure the financial system and restore investors' confidence in the financial market after the subprime crisis. Their findings reveal that financial institutions responded differently at various stages of the Act's legislative process. Additional analysis indicates that positive reactions were primarily observed among small and/or low-risk institutions, whereas negative reactions were consistent across most subsets, except for investment banks. Furthermore, the study revealed an increase in market risk for most financial institutions, particularly those dominated by small and/or low-risk entities. Cross-sectional analysis demonstrates that large institutions generally perform better than smaller ones.

Gao et al. (2018) analyzed market reactions to the key events leading to the passage of the 2010 Dodd-Frank Act in the U.S. They found that large financial institutions experienced strong negative abnormal stock returns in response to the key events of the Act, whereas there were strong positive abnormal bond returns in the same event windows. The results collectively suggest that capital markets anticipate that shareholders of large financial institutions will bear significant compliance costs of the legislation, likely due to the new prudential provisions and restrictions on banking and trading activities. Meanwhile, the positive reaction in the bond market supports the notion that the markets expect these provisions to effectively reduce the risk-taking behavior of these banks.

Gao et al. (2018) also studied the markets' expectations regarding the effectiveness of the Dodd-Frank Act in ending the bailout policy. They found that larger, more interconnected financial institutions generally had more negative abnormal stock returns and more positive abnormal bond returns. However, during the final phase of the legislative process, when negotiations and compromises occurred in Congress, these relationships were not evident. The overall positive abnormal bond returns for larger, more interconnected financial institutions suggest that the market perceives the Act as having the potential to reduce risk-taking behavior. Nevertheless, during the final stage

of the legislation, these institutions experienced mixed and mostly insignificant returns in both markets. This could be attributed to lobbying efforts by the financial industry, which led to the scaling back of some initial provisions aimed at reducing risk-taking behavior.

Empirical studies have documented both persistent and evolving governance issues within Brazilian SOEs. For instance, Silva et al. (2021) found that SOE boards were typically larger, less independent, and more likely to include the CEO than their private counterparts. Crisóstomo et al. (2020) also reported a negative association between ownership concentration and board independence in Brazilian firms.

Oliveira et al. (2020) used the ArCo (Artificial Counterfactual) methodology to investigate the impact of the State-Owned Enterprises Law on Brazilian publicly traded firms, specifically in reducing perceptions of management risk and stock return volatility. Their analysis of data spanning from 2011 to 2018 suggests that, while the law had an effect on the overall risk of SOEs, it did not significantly impact returns. The study also revealed mixed effects regarding the reduction of stock volatility.

However, more recent evidence suggests improvements linked to regulatory reforms. Brandão et al. (2023) observed that SOE boards have become more independent and are supported by institutionalized oversight mechanisms, such as internal audit committees and regular management performance evaluations. These advances are largely attributed to the mandates of the State-Owned Enterprises Law. Brandão (2024) further confirms these trends, emphasizing that the law introduced standardized criteria for board appointments and strengthened the institutional environment for SOE oversight.

3 Methodology

In this study, we applied the event study methodology to analyze how the Brazilian stock market responded to key developments related to the State-Owned Enterprises Law. This methodology was chosen for its effectiveness in isolating and quantifying the impact of specific events on economic or financial variables within well-defined time windows.

For each event, we identified two dates: one corresponding to the announcement or expectation phase and one corresponding to the actual implementation date. This dual-date approach serves two main purposes. First, it allows us to detect anticipated market reactions,

as investors often adjust their behavior based on new information before a policy is formally enacted. Second, it provides a precise legal reference point, marking when the rule officially comes into force and begins to produce legal effects. By distinguishing between expectation and implementation, this approach enables a more refined analysis of impact timing, allowing us to determine whether the observed effects stem from market anticipation or the actual enforcement of the legal measure. The research hypotheses are that positive (negative) events related to the State-Owned Enterprises Law have a positive (negative) effect on abnormal return and that the effect on abnormal return is lower for SOEs with better corporate governance structures.

Following Campbell et al. (1997), abnormal returns are measured using the market model, which is widely recognized as appropriate for event studies that analyze short-term effects using daily stock returns. This model is particularly effective in capturing immediate price reactions within short event windows, as it adjusts for overall market movements to more accurately isolate the event-specific impact on stock prices (Al-Awadhi et al., 2025). Accordingly, the expected return is calculated as follows (Equation 1):

$$E(R_{i,t}) = \alpha_i + \beta_i R_{i,M,t} \quad (1)$$

The calculation of the average abnormal return rate is determined by Equation 2:

$$AR_{i,t} = R_{i,t} - (\alpha_i + \beta_i R_{i,M,t}) \quad (2)$$

Finally, the calculation of the cumulative abnormal return rate is (Equation 3):

$$CAR_{i(t_1,t_2)} = \sum_{t_2}^{t=t_1} AR_{i,t} \quad (3)$$

Where $R_{i,t}$ is the return of stock i on trading day t ; $R_{i,M,t}$ is the market return rate; and α_i and β_i are estimated parameters of a market model in which the realized return of an individual stock is regressed against market index returns in the pre-event period (estimation period). $AR_{i,t}$ is the average abnormal return rate of stock i on trading day t , obtained by subtracting the expected return from the actual return. $CAR_{i(t_1,t_2)}$ is the cumulative abnormal return rate of stock i in the event window (t_1, t_2) .

We use the IBOVESPA index as a proxy for the market portfolio. Estimation windows that are too short may yield unreliable parameter estimates, while windows

that are too long risk incorporating unrelated market events and structural shifts. To balance these concerns and accurately estimate expected returns, we follow Souza and Barbedo (2024) in adopting a 180-trading-day estimation window preceding each event. In line with Rahman et al. (2021), we define the event window as $[-5, +5]$ trading days to reduce the potential confounding effects of overlapping or adjacent events. Our analysis examined the impact of two negative and two positive events on the Brazilian stock market. The positive events occurred on June 21, 2016 (the day the Senate approved the State-Owned Enterprises Law), and on June 30, 2016 (the day the federal government enacted the State-Owned Enterprises Law). The negative events took place on December 13, 2022 (the day the Chamber of Deputies approved a change easing the criteria for the State-Owned Enterprises Law), and on March 16, 2023 (the day the Brazilian Supreme Court overturned the restrictions of the State-Owned Enterprises Law).

Our data sample comprised 107 companies listed on B3. Following Shen et al. (2020) and Souza and Barbedo (2024), we excluded firms from the banking, insurance, and other financial sectors, as well as companies with missing data during the analysis period (Supplementary Data 1 – Stata Database; Supplementary Data 2 – Codebook). Data analysis was conducted using Stata statistical software. Financial institutions were removed due to their distinct regulatory, operational, and accounting frameworks, which make them incomparable to non-financial firms and may distort the results of the event study. The final sample of SOEs included the following shares: CMIG3, CSMG3, CPLE3, ELET3, PETR3, SBSP3, SAPR4, TAEE11, and TUPY3. Notably, Eletrobras (ELET3) – which was privatized on June 14, 2022 – was treated as an SOE only in the analysis of positive events.

To analyze the variations in stock returns across different B3 listing segments and SOE corporate governance levels, we employed the following B3 listing segments: Novo Mercado, Level 2, and Level 1. The Novo Mercado segment represents the highest level of corporate governance standards on B3. Companies listed in this segment must adhere to strict rules designed to protect minority shareholders' rights. These include the exclusive issuance of common shares (ON), which ensure equal voting rights under the one-share-one-vote principle, mandatory tag-along rights, and enhanced transparency and disclosure requirements. Firms in the Novo Mercado are widely recognized for adopting the most advanced corporate governance practices in Brazil. SOEs in this segment include CSMG3, SBSP3, and TUPY3.

The Level 2 segment also imposes rigorous corporate governance requirements, albeit not as extensive as those in the Novo Mercado segment. Companies in Level 2 must comply with regulations concerning disclosure, shareholder rights, and transparency. However, they enjoy some degree of flexibility compared to the Novo Mercado segment, particularly regarding tag-along rights. SOEs listed under Level 2 include CPLE3, PETR3, SAPR4, and TAEE11.

Level 1 has fewer corporate governance requirements compared to Level 2 and the Novo Mercado. Companies in Level 1 are still subject to listing regulations but have greater flexibility in governance practices. SOEs in this group include CMIG3 and ELET3.

The Traditional segment comprises companies that fulfill only the minimum legal and regulatory requirements for listing on the stock exchange, without adhering to any additional corporate governance commitments. Since no SOEs in the sample are listed under the Traditional segment, it is not included in the analysis.

To identify the effect of the State-Owned Enterprises Law on firm performance at the aggregate level, we applied the difference-in-differences (DID) method. DID is a widely used econometric technique for evaluating the impact of a treatment or intervention. It does so by comparing outcomes before and after the treatment, while controlling for a similar group that did not experience the intervention (Adkins, 2011).

DID models are especially common in public policy evaluation and intervention studies. There are essentially two groups: a treatment group affected by the policy change and a control group that remains unaffected. The treatment effect is estimated by comparing the differences in outcomes over time between these groups. Formally, the treatment effect (δ) can be expressed as (Equation 4):

$$\hat{\delta} = (\hat{C} - \hat{E}) - (\hat{B} - \hat{A}) = (\bar{y}_{Treatment, After} - \bar{y}_{Control, After}) - (\bar{y}_{Treatment, Before} - \bar{y}_{Control, Before}) \quad (4)$$

Where \bar{y} denotes the sample mean for each group and time period.

A key component of DID estimation is the interaction term between the treatment indicator (denoting whether a firm belongs to the treatment group) and the time indicator (denoting the post-treatment period). This interaction term captures the differential impact of the treatment over time.

In our study, we constructed an interaction coefficient to measure the impact of SOEs' cumulative abnormal returns (CAR) following key events on June 21, 2016; June 30, 2016; December 13, 2022; and March 16, 2023. To enhance the robustness of our estimates and better isolate the causal effect, we incorporated daily stock returns as a control variable within the DID framework. This adjustment accounts for firm-specific market dynamics and broader return fluctuations that could otherwise confound the estimated treatment effect.

Including daily returns as a control variable allows the DID model to more effectively isolate the impact of the law from other concurrent market movements or firm-level shocks, thereby improving the reliability of causal inference regarding the law's effect on firm performance.

4 Results

Table 1 displays the CARs of the analyzed companies for different events and event windows. Panel A shows that during the first positive event, the Senate's approval of the State-Owned Enterprises Law, SOEs recorded robust and statistically significant positive CARs across all event windows. These effects were particularly pronounced in the broader windows: CARs reached 7.74% in the [-3, +3] window and further increased to

8.49% in the [-5, +5] window. This consistently strong performance suggests a favorable market reassessment of SOEs, likely driven by investor expectations that the law would enhance corporate governance, reduce political interference, and improve the operational efficiency of these firms. These findings contrast with those of Oliveira et al. (2020), who found no evidence that the State-Owned Enterprises Law had any significant impact on SOE returns. In comparison, private firms displayed more moderate and subdued reactions to the same event. Although their CARs were also statistically significant, they were substantially smaller in magnitude: returns reached just 0.98% in the [-3, +3] window and 0.45% in the [-5, +5] window. This pronounced disparity in response reinforces the interpretation that the Senate's approval was perceived as a targeted reform with direct and substantial implications for SOEs, rather than a market-wide catalyst for the entire corporate sector.

Turning to the second positive event, the federal government's formal enactment of the State-Owned Enterprises Law, SOEs exhibited a mixed market response. While longer event windows continued to show positive abnormal returns, such as a CAR of 4.55% over the [-5, +5] window, the immediate reaction was unexpectedly negative. Specifically, SOEs recorded statistically significant negative CARs of -0.73% on the event day ([0, 0])

Table 1
Cumulative abnormal returns for four selected events in Brazil

Event Window	[0, 0]	[-1, +1]	[-2, +2]	[-3, +3]	[-4, +4]	[-5, +5]
Panel A: Positive Events						
06/21/2016						
All companies	0.05%***	0.43%***	1.87%***	1.55%***	2.17%***	1.13%***
SOEs	1.60%***	4.93%***	6.41%***	7.74%***	7.54%***	8.49%***
Private companies	-0.09%**	0.01%***	1.45%***	0.98%***	1.67%***	0.45%***
06/30/2016						
All companies	0.81%***	0.41%***	1.05%***	1.34%***	1.89%***	3.10%***
SOEs	-0.73%***	-0.92%***	1.33%***	3.44%***	3.50%***	4.55%***
Private companies	0.95%***	0.53%***	1.02%***	1.15%***	1.74%***	2.96%***
Panel B: Negative Events						
12/13/2022						
All companies	0.04%***	0.75%***	0.10%***	-2.85%***	-1.09%***	-0.23%***
SOEs	-0.17%***	-2.48%***	-2.77%***	-4.26%***	-3.44%***	-4.04%***
Private companies	0.05%***	1.01%***	0.33%***	-2.74%***	-0.90%***	0.07%***
03/16/2023						
All companies	-0.19%	0.10%***	-1.67%***	-1.62%***	-1.23%***	-0.47%***
SOEs	-2.18%**	-1.27%***	-1.20%***	-1.43%***	0.90%***	1.88%***
Private companies	-0.03%*	0.21%***	-1.71%***	-1.63%***	-1.41%***	-0.66%***

*** p-value < 0.01; ** p-value < 0.05; * p-value < 0.1.

and -0.92% over the [-1, +1] window. This short-term decline suggests that the positive expectations associated with the law were fully incorporated into market prices by the time of enactment. The data indicate that the day the Senate approved the State-Owned Enterprises Law (the first positive event) seems to have had a greater impact on SOEs' stock returns compared to the day the federal government enacted the law (the second positive impact).

In contrast, private firms showed consistently positive abnormal returns surrounding the enactment, with a CAR of 2.96% in the [-5, +5] window and significant gains even on the event day. This divergent response may reflect heightened investor confidence in the broader business environment, as the legislation signaled a commitment to institutional strengthening. Such developments can indirectly benefit private firms by reducing systemic risk and reinforcing expectations of economic stability, regulatory predictability, and adherence to the rule of law.

Panel B shows that during the first negative event, SOEs exhibited a clear and sustained pattern of negative abnormal returns, with CARs worsening progressively as the event window widened. On the event day ([0, 0]), SOEs recorded a statistically significant drop of -0.17%. Losses deepened over subsequent windows: -2.48% in [-1, +1], -4.26% in [-3, +3], and -4.04% in [-5, +5], all of which were significant at the 1% level. This consistent negative response reflects a strong market reaction to the perceived erosion of formal governance protections. Investors likely interpreted the legislative move as increasing political interference, weakening managerial accountability, and undermining long-term operational efficiency – factors that are particularly important when valuing SOEs.

In contrast, private firms showed a more mixed pattern. While they experienced short-term declines (e.g., -2.74% in the [-3, +3] window), CARs in the [-5, +5] window turned slightly positive at 0.07%, which was statistically significant at the 1% level. This differential response suggests that private firms were viewed as less directly affected by the institutional rollback. In fact, capital may have been reallocated toward them, as investors sought refuge in firms perceived as more insulated from political risk.

The second negative event produced a weaker and more ambiguous market reaction, particularly within the [-5, +5] window. SOEs experienced a statistically significant decline of -2.18% on the event day ([0, 0]), followed by negative but gradually diminishing CARs: -1.27% in

the [-1, +1] window and -0.47% in the [-5, +5] window. Although still negative, the smaller magnitude of the [-5, +5] CAR suggests that the initial market shock was partially absorbed as the implications of the ruling became clearer. Private firms followed a similar pattern, with early declines (-1.63% in the [-3, +3] window), but a more moderate response by the [-5, +5] window, where they reported a CAR of -0.66%, also statistically significant. Overall, these findings align with those reported by Orso et al. (2023), who observed a negative impact on state-controlled companies compared to non-state-controlled companies, especially during negative events. The data indicate that the day the Chamber of Deputies approved the easing of criteria for the State-Owned Enterprises Law (the first negative event) had a greater impact on SOEs' stock returns compared to the day the Brazilian Supreme Court overturned the restrictions of the State-Owned Enterprises Law (the second negative event).

To discuss the impact of the State-Owned Enterprises Law on these companies in greater depth, we highlight different B3 listing segments in relation to SOEs' corporate governance levels. It is expected that the quality of corporate governance will affect the performance of the analyzed companies differently. Table 2 shows the impact of the State-Owned Enterprises Law on the market value of the segregated B3 listing segments for the four selected events.

Table 2, Panel A shows that during the first positive event, the Senate's approval of the State-Owned Enterprises Law, SOEs listed under Level 1 governance standards exhibited a particularly strong and statistically significant positive response across all event windows. CARs reached 23.64% over the [-3, +3] window and peaked at 24.77% over the [-5, +5] window. SOEs in Level 2 also experienced significant positive abnormal returns, although of a lower magnitude: 6.03% and 8.05% over the same respective windows. These results indicate that investors interpreted the legislative approval as a credible commitment to enhancing governance and operational efficiency, with firms subject to weaker pre-existing governance requirements (i.e., Level 1) responding most strongly. These findings are consistent with the observations of Machado et al. (2020), who noted that investing in robust corporate governance has a direct and positive impact on the financial performance of Brazilian companies.

In stark contrast, SOEs listed under Novo Mercado, the segment with the highest governance standards, posted either minimal or negative returns.

Table 2

Cumulative abnormal returns for SOEs in different B3 listing segments

Event Window	[0, 0]	[-1, +1]	[-2, +2]	[-3, +3]	[-4, +4]	[-5, +5]
Panel A: Positive Events						
06/21/2016						
Level 1	4.39%***	13.91%***	17.69%***	23.64%***	23.32%***	24.77%***
Level 2	1.37%***	3.25%***	5.23%***	6.03%***	6.28%***	8.05%***
Novo Mercado	0.01%***	0.91%***	0.12%***	-0.97%***	-1.75%	-2.27%
06/30/2016						
Level 1	-0.08%***	-2.50%***	5.47%***	12.70%***	13.60%***	17.99%***
Level 2	-1.54%***	-0.50%***	0.49%***	1.61%***	1.09%***	2.36%***
Novo Mercado	-0.09%***	-0.45%***	-0.40%***	-0.46%***	-0.29%***	-1.82%***
Panel B: Negative Events						
12/13/2022						
Level 1	-2.06%	-2.18%	-2.26%	1.87%	-2.06%	-0.22%
Level 2	-0.85%***	-5.12%*	-5.07%*	-7.20%*	-5.02%*	-4.75%*
Novo Mercado	1.35%***	0.84%***	0.03%***	-2.57%	-2.08%***	-4.68%***
03/16/2023						
Level 1	-3.04%	1.95%	2.96%	2.62%	4.88%	8.54%
Level 2	-2.18%*	-1.92%***	-1.62%	-2.40%***	-0.99%***	-0.85%***
Novo Mercado	-1.91%	-1.49%	-2.06%***	-1.53%***	1.98%***	3.16%***

*** p-value < 0.01; ** p-value < 0.05; * p-value < 0.1.

For example, their CAR was 0.01% in the [0, 0] window and -0.97% in the [-3, +3] window. This divergence may reflect the market's perception that the law offered limited incremental governance benefits for firms already subject to stricter listing requirements.

The unexpected negative returns for Level 1 firms – -0.08% on the event day ([0, 0]) and -2.50% over the [-1, +1] window – were particularly notable, given their otherwise strong performance in response to the first legislative approval. Similarly, Level 2 firms posted negative returns of -1.54% and -0.50% in the same windows. These declines, together with the consistently negative abnormal returns observed for Novo Mercado firms across all event windows, came as a surprise and contrast with expectations that the enactment of the law would generate uniformly positive market responses. One possible explanation for the muted reaction of Level 1 and Level 2 firms is that investors had already incorporated the expected governance improvements into their valuations prior to the law's formal enactment.

In Panel B, we observed mixed effects across the listing segments. The results for Level 1 were inconclusive, as no significant findings emerged for the events on December 13, 2022, and March 16, 2023, across all windows. After the privatization of Eletrobras, only one company remained listed at Level 1, limiting the scope of our analysis. Although we anticipated that higher

listing levels (Novo Mercado and Level 2) would be more resilient to changes in the State-Owned Enterprises Law due to their stricter corporate governance requirements, our findings only partially supported this expectation. For instance, the average CARs for the [-4, +4] event window were -5.02% for Level 2 and -2.08% for Novo Mercado in response to the first negative event, and -0.99% for Level 2 and 1.98% for Novo Mercado in response to the second negative event. Notably, Level 2 performed the worst in both negative events. One possible explanation for this outcome is that Petrobras, which experienced significant losses due to the relaxed criteria in the State-Owned Enterprises Law, is listed under Level 2. These results partially align with the findings of Ribeiro and Souza (2023), who observed that, in Brazil, companies with robust corporate governance practices tend to outperform those with lower-quality governance standards.

To assess whether the market anticipated the effects of the law, we conducted a CAR analysis with an event window of 30 days. Tables 3–4 show the impact of the State-Owned Enterprises Law on the market value of private companies and SOEs for the four selected events.

It is important to note that in Table 3, the Senate's approval of the State-Owned Enterprises Law (the first positive event) and the federal government's enactment of the law (the second positive event) occurred only nine days apart. As a result, the longer event windows

Table 3

CARs for the two positive events with a 30-day event window

Event Window	06/21/2016		06/30/2016	
	Private Company	SOE	Private Company	SOE
[-30, 0]	-0.54%***	2.14%***	0.95%***	9.54%***
[-25, 0]	-1.85%***	1.82%***	1.34%***	9.71%***
[-20, 0]	-1.49%***	1.46%***	0.96%***	8.70%***
[-15, 0]	-0.70%***	2.26%***	0.79%***	8.71%***
[-10, 0]	-1.15%***	4.60%***	1.63%***	9.22%***
[-5, 0]	-0.94%***	1.60%***	1.87%***	3.14%***
[0, 0]	-0.09%**	1.60%***	0.95%***	-0.73%***
[0, +5]	1.30%***	8.49%***	2.04%***	0.67%***
[0, +10]	2.78%***	9.79%***	4.00%***	3.05%***
[0, +15]	4.81%***	12.89%***	8.28%***	4.46%***
[0, +20]	8.31%***	11.13%***	10.92%***	6.97%***
[0, +25]	11.00%***	14.97%***	13.30%***	6.17%***
[0, +30]	13.54%***	13.83%***	14.96%***	7.15%***

This table shows the cumulative average abnormal returns (CARs) for different event windows, where *** p-value < 0.01; ** p-value < 0.05;

* p-value < 0.1.

Table 4

CARs for the two negative events with a 30-day event window

Event Window	13/12/2022		16/03/2023	
	Private Company	SOE	Private Company	SOE
[-30, 0]	-5.23%***	-3.30%***	3.02%***	2.46%***
[-25, 0]	-9.78%	-2.90%***	2.40%***	-0.01%***
[-20, 0]	-5.73%**	-1.40%***	4.56%***	-0.15%***
[-15, 0]	-4.32%	-5.23%***	3.83%***	0.40%***
[-10, 0]	-1.86%***	-5.35%***	4.46%***	-0.40%***
[-5, 0]	-0.77%***	-2.95%***	1.70%***	0.60%***
[0, 0]	0.05%***	-0.17%***	-0.03%*	-2.18%**
[0, +5]	0.90%***	-1.26%***	-2.39%***	-0.90%***
[0, +10]	0.68%***	-1.61%***	-2.66%***	-0.88%***
[0, +15]	3.00%***	-3.42%***	-3.54%***	2.74%***
[0, +20]	5.43%***	-4.90%***	-2.33%***	1.53%***
[0, +25]	3.35%***	-5.73%***	-0.96%***	2.85%***
[0, +30]	6.17%***	-6.90%***	1.54%***	3.55%***

This table displays the cumulative average abnormal returns (CARs) for different event windows, where *** p-value < 0.01; ** p-value < 0.05;

* p-value < 0.1.

(e.g., [-30, 0], [0, +30]) may overlap across the two events, especially when calculating CARs for the second event. This proximity raises the risk of confounding effects, wherein the market's response to one event might partially reflect the anticipation or reaction to the other. To mitigate this issue, we place greater interpretive emphasis on the shorter, non-overlapping windows (e.g., [-10, 0], [-5, 0], [0, 0], [0, +5], and [0, +10]) when discussing anticipation and immediate market reactions. The longer windows are presented for completeness and robustness, but should be interpreted with caution in light of this overlap.

Table 3 shows that, within the [-10, 0] window preceding the Senate's approval of the State-Owned Enterprises Law (the first positive event), SOEs posted significant positive abnormal returns of 4.60%, while private firms recorded negative returns of -1.15%. This divergence suggests that investors anticipated the law would disproportionately benefit SOEs, likely due to expectations of improved corporate governance, reduced political interference, or enhanced operational efficiency. A similar pattern is observed prior to the presidential sanctioning (the second positive event), where SOEs

yielded abnormal returns of 9.22%, compared to 1.63% for private firms. The stronger reaction among SOEs reinforces the interpretation that the law was seen as particularly beneficial to these firms, with much of the anticipated value priced in before formal implementation.

On the event day itself ($[0, 0]$ window), SOEs exhibited a positive abnormal return of 1.60% after Senate approval, while private firms recorded a small but statistically significant negative return of -0.09% at the 5% significance level. This contrast reinforces the targeted nature of the market response. In contrast, the presidential sanctioning was associated with a negative abnormal return of -0.73% for SOEs, while private firms posted a positive return of 0.95%. This reversal suggests that the market had already internalized the expected benefits of the law by the time of its enactment and that the sanctioning introduced uncertainty or simply failed to generate new information.

In the days following Senate approval, SOEs experienced a strong and sustained increase in CARs – 8.49% in the $[0, +5]$ window and 9.79% in $[0, +10]$ – indicating continued market optimism. Private firms also showed gains (1.30% and 2.78%, respectively), though to a much smaller degree, confirming the law's targeted relevance. After the presidential sanctioning, market responses were more subdued. SOEs posted returns of 0.67% in the $[0, +5]$ window and 3.05% in the $[0, +10]$ window, while private firms posted returns of 2.04% and 4.00%, respectively. This pattern supports the interpretation that the approval phase carried the most informational value, with the market reaction largely tapering off by the time of formal enactment.

Table 4 shows that, during the days preceding the first negative event, SOEs displayed a clear and consistent pattern of negative abnormal returns, particularly in the $[-10, 0]$ and $[-5, 0]$ event windows, with CARs of -5.35% and -2.95%, respectively, both of which were statistically significant at the 1% level. This suggests that the market anticipated the legislative weakening of SOE governance mechanisms and adjusted expectations accordingly. In contrast, private firms also posted negative returns (-1.86% in the $[-10, 0]$ window), but to a lesser extent, indicating that the event was perceived as having a more direct and adverse effect on SOEs.

On the event day ($[0, 0]$), SOEs experienced a modest but significant drop of -0.17%, while private firms showed a small but significant increase of 0.05%. This muted same-day response from SOEs implies that

much of the anticipated negative impact had already been priced in during the preceding days. Following the event, SOEs continued to experience a downward trend, with CARs reaching -1.26% in the $[0, +5]$ window and -6.90% by the $[0, +30]$ window. This persistent negative trend reflects the market's sustained concern over the erosion of governance standards and heightened perception of political interference. In contrast, private firms began to recover, with CARs turning positive and rising to +6.17% by the $[0, +30]$ window. One possible explanation is that investors may have reallocated capital from SOEs to private firms, which were perceived as more resilient to political risk and better shielded from the implications of the regulatory rollback.

The market responded differently to the Supreme Court's decision – the second negative event – than it did to the earlier legislative change. In the days leading up to the ruling, there was little evidence of market anticipation. SOEs exhibited marginal or flat abnormal returns, recording a CAR of -0.40% in the $[-10, 0]$ window, while private firms posted notable positive returns (4.46% in the same window), likely driven by unrelated macroeconomic developments or firm-specific news.

On the event day itself ($[0, 0]$), SOEs experienced a sharp and statistically significant negative abnormal return of -2.18%, consistent with investor concerns about the removal of legal protections and the resurgence of political influence in SOE governance. Private firms, by contrast, showed no statistically significant response, suggesting limited direct exposure to the ruling.

In the aftermath of the decision, SOEs initially continued to underperform (-0.90% in the $[0, +5]$ window), but their returns gradually rebounded, turning positive and reaching 3.55% by the $[0, +30]$ window. This recovery may indicate a partial correction following an initial overreaction, or a reassessment by investors that the ruling's practical impact on SOE operations might be more limited than initially feared. Interestingly, private firms, despite their initial stability, recorded significant negative abnormal returns in the days following the ruling (e.g., -2.39% in the $[0, +5]$ window and -2.66% in the $[0, +10]$ window). This pattern may reflect broader concerns about increased state intervention in the economy, potential disruptions to competitive dynamics, or a deteriorating institutional environment affecting investor confidence. Nonetheless, private firms also showed signs of recovery in longer windows, suggesting that while the event raised concerns, its long-term implications remained uncertain.

To enhance the robustness of the empirical findings, we conducted an additional analysis using the DID methodology. Table 5 reports the resulting DID coefficients for the four events analyzed. These estimates capture the differential effect of each event on SOEs' abnormal returns while controlling for general market trends and firm-specific dynamics. By leveraging the variation between treated (SOEs) and control (private firms) groups before and after each event, the DID framework strengthens our ability to isolate the effect attributable to the institutional and regulatory changes.

The positive and statistically significant DID coefficient of 0.050, following the Senate's approval of the State-Owned Enterprises Law on June 21, 2016, confirms and complements the event study results, which had already revealed substantial positive abnormal returns for SOEs in the days surrounding the announcement. This alignment between methodologies suggests that the market reacted favorably and distinctly to the legislative measure, perceiving it as particularly beneficial to SOEs compared to private firms. The convergence of evidence supports the interpretation that investors viewed the law as a meaningful governance reform, likely to strengthen operational efficiency, reduce political interference, and enhance long-term performance in state-owned companies. The positive market reassessment at this early legislative stage underscores the signaling power of credible institutional reforms in shaping investor expectations and influencing capital allocation.

In contrast, the DID estimate for the presidential sanctioning of the State-Owned Enterprises Law on June 30, 2016, was negative and did not show statistical significance, with a coefficient of -0.015 and a p-value of 0.436. This result aligns with the event study findings, which indicated a subdued or even slightly negative market response on the date of the sanctioning. Taken together, these outcomes suggest that investors had already priced in the anticipated benefits of the law following its approval by the Senate, viewing the presidential sanctioning as a

procedural formality rather than a substantive development. The muted reaction underscores the market's tendency to respond primarily to pivotal legislative milestones that signal genuine shifts in institutional governance, rather than to subsequent administrative ratifications.

The negative DID coefficient following the Chamber of Deputies' approval of governance-relaxing amendments on December 13, 2022 was -0.033 and statistically significant at the 5% level. This result aligns closely with the event study findings, which showed sustained negative abnormal returns for SOEs during the same period. The consistency between these results indicates that investors viewed the legislative changes as a deterioration of governance standards, increasing the perceived risk of political interference and operational inefficiency in SOEs. The market's negative response reflects a broader tendency to reward credible institutional reforms while penalizing perceived rollbacks, reinforcing the critical role of governance structures in SOE valuation. In this context, the amendments were likely interpreted as a shift toward a less disciplined regulatory environment, reducing transparency and accountability and undermining confidence in the long-term stability of SOEs.

By contrast, the Supreme Court's decision on March 16, 2023, which overturned some restrictions of the State-Owned Enterprises Law, did not produce a statistically significant DID effect. The estimated coefficient was 0.006, with a p-value of 0.566, indicating a lack of a strong market reaction. This subdued response is consistent with the event study's more muted and ambiguous findings and may reflect the market's anticipation of legal developments or the uncertainty surrounding the ruling's practical implications at the time. Unlike legislative actions, judicial decisions often involve interpretive complexity and uncertain implementation timelines, making it more difficult for investors to immediately assess their impact. As a result, the market response to judicial events may be more restrained, especially when compared to the clearer and more direct signaling effects of legislative interventions.

Table 5
DID for four selected events in Brazil

Event Date	Coefficient DID	Std. Error	P-value
06/21/16	0.050	0.025	0.046
06/30/16	-0.015	0.020	0.436
12/13/22	-0.033	0.016	0.044
03/16/23	0.006	0.011	0.566

This table displays the DID for the impact of the SOE's CAR.

5 Conclusion

This study examined how the Brazilian stock market responded to four key events related to the State-Owned Enterprises Law, focusing on the differences between state-owned enterprises (SOEs) and private firms, the varying impacts across different levels of corporate governance in B3 listing segments, and the anticipation and timing of market reactions.

The primary contribution of this research lies in demonstrating that legislative interventions aimed at reforming SOE governance have a significant and differentiated impact on stock returns. Positive events, particularly the Senate's approval of the State-Owned Enterprises Law, triggered substantial and sustained abnormal returns for SOEs, reflecting strong market optimism about expected enhancements in governance quality, operational efficiency, and reduced political interference. Conversely, negative events associated with the easing of governance standards resulted in significant declines in SOE stock prices, signaling investor apprehension regarding reduced transparency, weaker accountability, and the potential resurgence of political patronage. Notably, the market's responses were markedly stronger and more immediate during legislative milestones than during judicial decisions, highlighting the superior signaling power and clarity of formal legislative reforms compared to ambiguous judicial rulings.

Further granularity was achieved by examining the heterogeneity of responses across different B3 listing segments, which represent varying levels of corporate governance. Firms with lower governance standards demonstrated more pronounced positive reactions to favorable events, likely because the reforms offered greater incremental governance improvements and risk mitigation for these companies. Conversely, firms subject to higher governance standards exhibited mixed outcomes, with certain segments such as Level 2 unexpectedly underperforming during adverse regulatory changes – an effect largely driven by prominent and influential firms like Petrobras. This underscores the complex interplay between pre-existing governance frameworks and regulatory shifts in shaping investor perceptions and stock price movements.

Complementing the event study, the difference-in-differences (DID) analysis reinforced these insights by confirming a statistically significant positive market reassessment following the Senate's approval of the law and a significant negative effect associated with the governance-relaxing amendments passed by the Chamber

of Deputies. The absence of significant DID effects for other events suggests that market participants had already priced in anticipated changes well before formal enactment, emphasizing the critical role of market anticipation and efficient information assimilation in moderating observable stock return reactions.

Despite these contributions, the study has some limitations. While the use of the Capital Asset Pricing Model (CAPM) to estimate abnormal returns is standard, it may omit relevant risk factors captured by more sophisticated asset pricing models, such as the Fama-French three- or five-factor models. Additionally, relying on daily stock return data restricts the incorporation of accounting-based performance metrics or macroeconomic indicators, which are typically reported at lower frequencies, potentially overlooking important contextual factors. The limited sample size and number of SOEs listed in some governance segments reduced the ability to detect effects within certain subgroups.

Future research could address these limitations by employing multifactor asset pricing models and expanding the dataset to include quarterly financial information and broader macroeconomic variables. Incorporating longer time horizons and alternative measures of firm performance could improve our understanding of how governance reforms affect both market valuation and operational outcomes over time. Further exploration of investor behavior through market microstructure analysis or sentiment studies could also shed light on the mechanisms driving the observed stock price reactions. Finally, comparative studies across countries with different institutional environments could help generalize these findings and inform SOE governance reform policies worldwide.

References

- Adkins, L. C. (2011). *Using Stata for principles of econometrics*. John Wiley & Sons.
- Al-Awadhi, M. A., Bash, A., Algharabali, B., & Al-Failakawi, A. Y. (2025). From chaos to consensus: An event study on the Korean stock market. *Cogent Economics & Finance*, 13(1). <https://doi.org/10.1080/23322039.2025.2502437>.
- Andriosopoulos, K., Chan, K. K., Dontis-Charitos, P., & Staikouras, S. K. (2017). Wealth and risk implications of the Dodd-Frank act on the U.S. financial intermediaries. *Journal of Financial Stability*, 33, 366-379. <https://doi.org/10.1016/j.jfs.2016.09.006>.

- Brandão, I. F. (2024). Monitoramento ou expropriação? As relações entre controle acionário, conselho de administração e diretoria executiva nas empresas brasileiras de capital aberto. *Enfoque: Reflexão Contábil*, 43(1), 69-89. <https://doi.org/10.4025/enfoque.v43i1.62199>.
- Brandão, I. F., Silva, L. A., & Silva, F. V. A. (2023). Controle acionário e estrutura de governança corporativa das empresas brasileiras de capital aberto. *Gestão.Org – Revista Eletrônica de Gestão Organizacional*, 21(1), 1-28. <https://doi.org/10.51359/1679-1827.2023.253012>.
- Campbell, J., Lo, A., & Mackinlay, A. (1997). *The econometrics of financial markets*. Princeton University Press. <https://www.jstor.org/stable/j.ctt7skm5>.
- Coase, R. (1937). The nature of the firm. *Economica*, 4(16), 386-405. <https://doi.org/10.1111/j.1468-0335.1937.tb00002.x>.
- Crisóstomo, V. L., Brandão, I. F., & López-Iturriaga, F. J. (2020). Large shareholders' power and the quality of corporate governance: An analysis of Brazilian firms. *Research in International Business and Finance*, 51, 101076. <https://doi.org/10.1016/j.ribaf.2019.101076>.
- Fama, E., & Jensen, M. C. (1983a). Separation of ownership and control. *The Journal of Law & Economics*, 26(2), 301-325. <https://doi.org/10.1086/467037>.
- Fama, E., & Jensen, M. C. (1983b). Agency problems and residuals claims. *The Journal of Law & Economics*, 26(2), 327-349. <https://doi.org/10.1086/467038>.
- Fontes Fo., J. R. (2018). A governança corporativa em empresas estatais brasileiras frente a lei de responsabilidade das estatais (Lei nº 13.303/2016). *Revista do Serviço Público*, 69, 209-238. <https://doi.org/10.21874/rsp.v69i0.3276>.
- Gao, Y., Liao, S., & Wang, X. (2018). Capital markets' assessment of the economic impact of the Dodd-Frank act on systemically important financial firms. *Journal of Banking & Finance*, 26, 204-223. <https://doi.org/10.1016/j.jbankfin.2016.03.016>.
- Jain, P. K., & Rezaee, Z. (2006). The Sarbanes-Oxley act of 2002 and capital-market behavior: Early evidence. *Contemporary Accounting Research*, 23(3), 629-654. <https://doi.org/10.1506/2GWA-MBPJ-L35D-C4K6>.
- Jensen, M., & Meckling, W. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*, 3(4), 305-360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X).
- Kroszner, R. S., & Rajan, R. (1995). *Organization structure and credibility: Evidence from commercial bank securities activities before the Glass-Steagall act* (Working paper, no. 5256). National Bureau of Economic Research. <https://doi.org/10.3386/w5256>.
- Machado, L. K. C., Prado, J. W., Rauber, L. L., Carvalho, E. G., & Santos, A. C. (2020). A influência da governança corporativa no desempenho financeiro, na oportunidade de crescimento e no valor de mercado das firmas: Uma análise com modelagem de equações estruturais. *Enfoque: Reflexão Contábil*, 39(2), 27-41. <https://doi.org/10.4025/enfoque.v39i2.45852>.
- Musacchio, A., Lazzarini, S. G., & Aguilera, R. V. (2015). New varieties of state capitalism: Strategic and governance implications. *The Academy of Management Perspectives*, 29(1), 115-131. <https://doi.org/10.5465/amp.2013.0094>.
- Oliveira, V. K., Holland, M., & Sampaio, J. O. (2020). A nova Lei das Estatais afetou as empresas estatais listadas na bolsa? *Revista Brasileira de Finanças*, 18(1), 23-38.
- Organisation for Economic Co-operation and Development – OECD. (2015). *OECD guidelines on corporate governance of state-owned enterprises*. OECD Publishing. <https://doi.org/10.1787/9789264244160-en>.
- Organisation for Economic Co-operation and Development – OECD. (2019). *Guidelines on anti-corruption and integrity in state-owned enterprises*. OECD Publishing. https://www.oecd.org/en/publications/guidelines-on-anti-corruption-and-integrity-in-state-owned-enterprises_315dab91-en.html.
- Organisation for Economic Co-operation and Development – OECD. (2020). *OECD review of the corporate governance of state-owned enterprises: Brazil*. OECD Publishing. https://www.oecd.org/en/publications/oecd-review-of-the-corporate-governance-of-state-owned-enterprises-brazil_ce25dd28-en.html.

Orso, L. É., Santos, R. C., Raupp, F. M., & Sousa, A. M. R. (2023). Ownership structure and shareholders: Perspectives on conflict between state participation in the value of companies on the Brazilian stock exchange-B3. *Revista do CEJUR/TJSC: Prestação Jurisdicional*, 11, e0400. <https://doi.org/10.37497/revistacejur.v11i00.400>.

Rahman, M. L., Amin, A., & Al Mamun, M. (2021). The COVID-19 outbreak and stock market reactions: Evidence from Australia. *Finance Research Letters*, 38, 101832. <https://doi.org/10.1016/j.frl.2020.101832>. PMID:36569654.

Ribeiro, J. E., & Souza, A. A. (2023). Impacto da Governança Corporativa no Desempenho Financeiro: Evidências no Mercado Acionário Brasileiro. *Revista Contabilidade, Gestão e Governança*, 26(1), 63-91. <https://doi.org/10.51341/cgg.v26i1.3021>.

Shen, H., Fu, M., Pan, H., Yu, Z., & Chen, Y. (2020). The impact of the COVID-19 pandemic on firm performance.

Emerging Markets Finance & Trade, 56(10), 2213-2230. <https://doi.org/10.1080/1540496X.2020.1785863>.

Silva, N. D., Peixoto, F. M., & Tizziotti, C. P. P. (2021). Características do conselho de administração e earnings management no Brasil: as estatais são diferentes? *Revista Gestão.org*, 19(1), 52-71. <https://doi.org/10.51359/1679-1827.2021.239657>.

Simões, J. J. F., Souza, V. G., Mello, R. C., Souza, A. A., & Ferreira, B. P. (2021). The impact of BNDES's financial resources on the market value of B3-listed companies. *Revista Contabilidade, Gestão e Governança*, 24(1), 20-36. https://doi.org/10.51341/1984-3925_2021v24n1a2.

Souza, V. G., & Barbedo, C. H. S. (2024). COVID-19 impact on the Brazilian stock market. *Contextus - Contemporary Journal of Economics and Management*, 22, e93250. <https://doi.org/10.19094/contextus.2024.93250>.

Financial support:

The authors declare that they did not receive any financial support.

Research data availability statement - Open science:

The full data supporting the findings of this study has been made available at <https://doi.org/10.7910/DVN/MA9L5M>.

Conflicts of interest:

The authors have no conflicts of interest to declare.

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