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Tax Aggressiveness and Corporate Financialization in Brazil

ABSTRACT

Objective: This study investigates the relationship between tax aggressiveness and corporate financialization in companies listed on Brazil's B3 Stock Exchange from 2009 to 2022.
Method: The sample comprises 1,630 firm-year observations after excluding financial companies, firms with negative pre-tax income, and outliers. We employed a panel linear regression model, adjusting for fixed effects related to individual companies and specific years. We used metrics such as abnormal book tax differences (BTDA), effective tax rate (ETR), and Comprehensive Value-Added Tax Rate (CVATR) to measure tax aggressiveness.
Originality/Relevance: This study is pioneering in exploring the nexus between tax aggressiveness and corporate financialization in Brazil, offering critical insights for local researchers, investors, policymakers, and financial analysts seeking to decipher the nuances of financialization and tax planning in Brazil's singular economic landscape. The innovative approaches proposed for quantifying financial assets provide invaluable analytical advancements tailored to the country's unique market conditions.
Results: Our findings show a positive correlation between tax aggressiveness and corporate financialization. Firms employing aggressive tax strategies exhibited increased financialization. For robustness, dummy variables targeting aggressively taxed firms were introduced, confirming the initial relationship. CVATR emerged as a particularly effective metric in the Brazilian context due to its complex tax structure.
Theoretical/Methodological contributions: Our research introduces innovative approaches for measuring financial assets tailored to Brazil's unique market conditions. It also enriches the current body of literature by confirming CVATR as an effective metric for capturing tax aggressiveness in Brazil.

Keywords: Tax Aggressiveness, Corporate Financialization, B3 Stock Exchange.

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1 INTRODUCTION

The resilience of the industrial sector has been severely tested in the past decades, first by the 2008 global financial crisis and more recently by the economic repercussions of the Covid-19 pandemic. A marked decline in consumer demand and contracting profit margins are phenomena well-documented in contemporary literature (Klinge et al., 2021; Liu et al., 2022). Confronted with these challenges, a noteworthy shift has occurred within nonfinancial companies, which have increasingly turned to generating financial returns. This trend, known as 'Corporate Financialization', has become a focal point of academic inquiry (Zhu et al., 2023; Zou & Zhang, 2023). In the face of such economic adversity, tax planning has surfaced as a pivotal survival tactic for corporations striving to find cost-saving avenues and investment opportunities (Martinez, 2017; Wang et al., 2020).

Tax aggressiveness, a term that encompasses strategies extending from tax avoidance to the brink of tax evasion, has been scrutinized extensively in the existing literature for its strategic utility across varying contexts and industries (Kovermann & Velte, 2019; Wang & Yao, 2021; Asiri et al., 2020). While these studies have illuminated the role of aggressive tax planning as an essential instrument for firms in unstable economies to shield profits and enhance shareholder value (Martinez, 2017; Alcântara et al., 2023, a lacuna persists. The intricacies of how tax aggressiveness interacts with corporate financialization, especially within state-owned enterprises or heavily-regulated sectors, have not been adequately examined (Su & Liu, 2021; Hossain et al., 2022; Zhu et al., 2023).

This study seeks to bridge this gap by delving into the interplay between aggressive tax planning and corporate financialization within the specific setting of nonfinancial firms listed on Brazil's B3 stock exchange. Our research, anchored in a robust panel data regression analysis covering the period from 2009 to 2022, scrutinizes 1,630 observations to discern the complex patterns of corporate fiscal behavior. We employ a spectrum of metrics, such as the Abnormal

Book Tax Difference (BTDA), Effective Tax Rate (ETR), and a novel metric introduced herein, the Comprehensive Value-Added Tax Rate (CVATR).

Our contribution to the scholarly dialogue is the spotlight on Brazil's unique economic terrain—a subject scarcely addressed in prior studies. We shed light on the nuances of Brazil's intricate tax system, particularly its consumption tax-heavy framework, which propels corporate financialization. The implications of our findings extend beyond theoretical interest; they have substantial practical significance, equipping policymakers, investors, and other stakeholders with critical insights into the complexities of financialization and tax planning within the Brazilian economic context.

2 THEORETICAL FRAMEWORKS

2.1 Tax Aggressiveness and Its Intersection with Corporate Financialization

Tax aggressiveness is increasingly scrutinized by academics, policymakers, and the public, especially in light of corporate tax evasion cases highlighted in the media (Kovermann & Velte, 2019; Wang & Yao, 2021). Its primary aim is to reduce tax liabilities, thereby boosting company profits and cash flow (Wang et al., 2020).

The complexity of this concept lies in the difficulty of distinguishing between legal and illegal tactics (Marques et al., 2022). Factors such as alignment of incentives, market pressures, and stakeholder influence are known to drive tax aggressiveness (Kovermann & Velte, 2019).

There is a positive correlation between financial incentives for managers and tax aggressiveness (Alcântara et al., 2023; Zhu et al., 2023). Practices like delayed disclosure, utilization of tax havens, and adjustments in financial statements may suggest aggressive strategies, though they are not inherently illegal (Chiachio & Martinez, 2019).

While tax aggressiveness can meet shareholder demands for dividends, it may also lead to risky and unsustainable strategies (Hossain et al., 2022). Effective governance mechanisms and incentives are crucial to prevent abuse (Asiri et al., 2020; Wang et al., 2020).

Companies often engage in complex transactions to avoid detection, which can impact market transparency (Wang & Yao, 2021). Firms in financial distress might excessively rely on aggressive tax planning, potentially creating a harmful cycle (Hossain et al., 2022; Zhu et al., 2023).

Such strategies are often more pronounced in firms that exploit legislative ambiguities and are influenced by shareholder interests. Corporate Social Responsibility (CSR) also plays a role in shaping tax aggressiveness (Asiri et al., 2020).

2.2 Tax Aggressiveness in Brazil

In Brazil, the ambiguity in tax behavior has sparked ongoing debates regarding the boundaries of legal tax aggressiveness (Chiachio and Martinez, 2019). Researchers like Martinez (2017) and Kovermann & Velte (2019) have explored why certain firms exhibit higher levels of tax aggressiveness.

The corporate tax burden in Brazil is substantial, with a 34% rate primarily from Corporate Income Tax (IRPJ) and Social Contribution on Net Profit (CSLL) (Alcântara et al., 2023). The complexity is further exacerbated by the presence of 92 other tax types and frequent legislative changes (Marques et al., 2022).

Cabello et al. (2019) observe that high tax rates challenge corporate compliance. However, Wang et al. (2020) and Marques et al. (2022) emphasize the reliance of states on these revenues to guarantee basic rights for citizens, making the issue of abusive tax planning particularly acute in developing countries.

Ineffective tax enforcement and high tax rates often lead companies to seek strategies for tax reduction (Cabello et al., 2019). Although the regulations surrounding Abusive Tax

Planning are somewhat vague, authorities have the ability to implement countermeasures to maintain financial equilibrium (Martinez, 2017; Marques et al., 2022).

Research by Alcântara et al. (2023) indicates that many firms listed on B3 exploit legal tax benefits, creating imbalances detrimental to social and economic development (Martinez, 2017; Chiachio & Martinez, 2019).

Chiachio and Martinez (2019) underscore the growing concern over abusive tax practices that directly impact state revenues and public services. Aggressive tax behavior not only affects public services but also creates an uneven competitive environment (Martinez, 2017; Cabello et al., 2019; Alcântara et al., 2023).

2.3 Corporate Financialization

Corporate financialization, representing a shift from traditional economic activities to financial ones, has attracted significant attention from both academia and industry due to its impact on society and the economy (Aalbers, 2019). This trend, which became prominent after the 2008 crisis, has roots that may extend back to even before the U.S. mortgage crisis (Klinge et al., 2021; Liu et al., 2022; Wang, 2019; Tao et al., 2021).

Recent studies have focused on its role in global economic crises, including the Covid-19 pandemic (Klinge et al., 2021; Liu et al., 2022). It prioritizes liquidity and cash flow management over long-term innovation. (Wang, 2019; Yang & Li, 2023). Corporate financialization has led to a redirection of resources towards financial activities, particularly impacting nonfinancial firms (Klinge et al., 2022; Zhu et al., 2023; Wang, 2019; Jin et al., 2022; Yang & Li, 2023; Zou & Zhang, 2023).

This phenomenon is observed universally across various sectors and is attributed to factors such as rising operational costs and changes in traditional banking practices (Tao et al., 2021; Liu et al., 2022; Yang & Li, 2023). Other contributing factors include advancements in technology, business diversification, and liquidity needs (Hu et al., 2023).

The shift towards corporate financialization has led to a new focus on shareholder value, particularly among nonfinancial firms worldwide (Corrêa et al., 2017; Aalbers, 2019; Klinge et al., 2021). This shift has resulted in firms prioritizing financial metrics over operational performance (Sui & Yao, 2023; Zou & Zhang, 2023; Xue et al., 2023).

The trend towards a virtual economy has significant implications for global organizational development, leading to an emphasis on short-term profits and risky financial assets (Wang, 2019; Zhu et al., 2023; Zhao & Su, 2022; Cao & Li, 2022; Xue et al., 2023; Zou & Zhang, 2023). Consequences of this trend include increased unemployment, social inequality, and economic slowdown, particularly in the U.S. and Asia (Sui & Yao, 2023; Xue et al., 2023).

In China, there is an ongoing debate about reforming the financial system to focus more on the real economy (Liu et al., 2022; Hu et al., 2023; Xue et al., 2023). The expansion of digital technology post-Covid-19 has aided in recovery but also exacerbated inequality (Sui & Yao, 2023).

Financialization is being studied globally for its contribution to artificial growth, raising questions about the sustainability of such growth in the long term (Klinge et al., 2022; Liu et al., 2022; Aalbers, 2019). In summary, while corporate financialization signifies a major economic transformation, it also brings challenges such as financial instability that require policy intervention (Aalbers, 2019; Cao & Li, 2022).

2.4 Corporate Financialization in Brazil

In emerging countries like Brazil, corporate financialization is shaped by factors such as integration into the global system, local system changes, corporate indebtedness, financial market involvement, and political uncertainties (Corrêa et al., 2017; Kaltenbrunner & Painceira, 2017). Brazilian firms, particularly nonfinancial ones, have increased their debt levels significantly during periods of financialization, and recently, there has been a notable increase in their involvement in capital markets (Corrêa et al., 2017; Kaltenbrunner & Painceira, 2017; Alcântara et al., 2023).

The onset of financialization in Brazil can be traced back to the 1970s-80s, gaining momentum after the Real Plan's economic stabilization (Mantoan et al., 2021). Between 2003-2008, Brazilian companies saw improved performance, but the 2008 crisis exposed their financial vulnerabilities, leading to strategic shifts (Corrêa et al., 2017).

Post-crisis, Brazilian firms, facing rising inflation, increasingly engaged in short-term, volatile activities (Mantoan et al., 2021; Yang & Li, 2023). Large listed companies, in particular, underwent restructuring and intensified their financialization practices (Mantoan et al., 2021; Zhu et al., 2023).

Consistently facing higher interest rates compared to other countries, Brazil, since 2015, has grappled with the challenges of the pandemic amid lost economic policy autonomy, compelling nonfinancial firms to adopt aggressive financial solutions (Mantoan et al., 2021; Yang & Li, 2023).

Financialization in Brazil's capital market is possibly influenced by dominant group or family controls, augmented by a dual asset class system (Mantoan et al., 2021; Corrêa, 2017). The influx of foreign capital and the pressure it places on B3-listed companies to prioritize short-term gains has spurred the growth of financialization (Mantoan et al., 2021; Alcântara et al., 2023).

This trend encourages firms to engage in speculation, increasing their dependence on financial markets (Corrêa, 2017; Mantoan et al., 2021). The focus on short-term investments poses challenges to the resumption of real investment, potentially creating disparities among companies of different sizes (Kaltenbrunner & Painceira, 2017).

In conclusion, while corporate financialization is not the sole obstacle to Brazil's growth, it significantly influences its developmental trajectory (Mantoan et al., 2021).

2.5 Tax Aggressiveness and Corporate Financialization

The 2008 financial crisis and its aftermath compelled companies to maximize profits in a challenging market environment (Klinge et al., 2022; Zhu et al., 2023). This shift affected not only their operations but also led to changes in their financial behaviors (Wang & Yao, 2021). Aggressive tax planning emerged as a strategy to enhance cash flows, though it did not necessarily enhance firm value (Wang et al., 2020; Hossain et al., 2022; Zhu et al., 2023).

These tactics may redirect resources towards financial investments, potentially not aligning with shareholders' best interests (Liu et al., 2022; Zhu et al., 2023). Such strategies often prioritize short-term gains over long-term investments (Wang & Yao, 2021; Zhu et al., 2023). Zhu et al. (2023) suggest that tax savings might be invested in activities misaligned with firm goals, potentially damaging value and share performance (Liu et al., 2022).

In the Chinese capital market, a high level of tax aggressiveness is positively correlated with the adoption of corporate financialization strategies (Hu et al., 2023; Zhu et al., 2023). This approach is attractive to managers seeking to minimize tax risks and maximize short-term profits (Zhu et al., 2023). However, the lack of oversight may enable managers to pursue personal gains at the expense of the State (Assiri et al., 2020; Liu et al., 2022). Additionally, punitive measures against aggressive tax practices may cause reputational harm to managers (Zhu et al., 2023).

The issue is exacerbated by increased managerial autonomy and financialization, leading to information asymmetry and higher agency costs (Sui & Yao, 2023; Xue et al., 2023). This is particularly concerning when managers have speculative motives (Jin et al., 2022).

2.6 Reasoning for the Hypothesis

The central hypothesis of this research is: Brazilian companies listed on B3 are more inclined to engage in corporate financialization when they adopt aggressive tax planning practices. This hypothesis is inspired by the established relationship between tax aggressiveness and corporate financialization in Chinese firms, as noted by Zhu et al. (2023). The rationale for this hypothesis includes:

i. Comparative Analysis: The economic and corporate structures of Brazil and China, while distinct, share key similarities in market dynamics and regulatory frameworks. This similarity allows for a comparative study of their corporate behaviors, especially in the areas of tax strategies and financialization.

ii. Global Corporate Trends: The trend towards aggressive tax planning and financialization is a global phenomenon. This suggests that Brazilian companies might mirror the strategies of their Chinese counterparts, responding similarly to international economic pressures.

iii. Regulatory Environment Impact: Both Chinese and Brazilian firms operate in complex regulatory environments, which often prompt them to adopt aggressive tax planning. This, in turn, can lead to a greater emphasis on financialization as a strategic approach.

iv. Market Pressures and Competition: Facing similar market pressures to deliver shareholder value and maintain competitiveness, companies in both countries may resort to aggressive tax strategies and financialization tactics to enhance their profitability and market position.

v. Cultural and Managerial Influences: Despite cultural and managerial differences, a common trend in both Chinese and Brazilian firms is the prioritization of financial metrics and short-term gains, indicative of a broader shift towards financialization.

vi. Economic Challenges: The economic challenges and transformations in both China and Brazil have influenced corporate strategies, pushing firms towards more aggressive financial and tax planning methods to navigate economic uncertainties.

This hypothesis aims to explore if the relationship between tax aggressiveness and corporate financialization observed in Chinese firms applies to Brazilian companies, particularly those listed on B3. This exploration is significant given the substantial role these firms play in Brazil's economy and their interaction with global market forces.

3 METHODOLOGIES

We conducted descriptive quantitative research with secondary data collection and a longitudinal section to investigate the relationship between tax aggressiveness and corporate financialization. This methodological choice enables the analysis of the interactions between the variables in question based on a representative sample of data over a given period.

3.1 Sample Composition and Selection

A sample of Brazilian publicly traded companies listed on B3 was selected for the research. The year 2009 was chosen as the starting point due to the impact caused by the 2008 global financial crisis on the world economy (Klinge et al., 2021; Mantoan et al., 2021; Liu et al., 2022). The period it investigated comprised the years 2009 to 2022, as it covers a relevant sample and allows the identification of possible trends over time, as well as the incorporation of more recent data for the research.

In line with the methodological approaches adopted by Xu and Xuan (2021), Liu et al. (2022), and Zhu et al. (2023), companies in the financial sector were excluded from the sample since the phenomenon of corporate financialization is restricted to nonfinancial companies and the financial sector follows accounting standards with different particularities. Also, companies with negative pre-tax results (negative LAIR) were eliminated since these companies have different tax strategies (Martinez, 2017; Alcântara et al., 2023). Next, the procedures of Corrêa et al. (2017) and Martinez and Silva (2018) were adopted for the exclusion of ETR metric values lower than 0 and higher than 1 to ensure a more appropriate understanding of the level of tax aggressiveness, considering that the standard percentage of taxes on profit is 0.34. Finally, companies without data for the variables used in the analyses were removed from the sample.

Table 1 presents the composition and selection of the survey sample.

Table 1

Composition and selection of the research sample from the population

Year	Description	Quantity	Observations
2009 to 2022	Active companies listed on B3	401	
	Financial sector companies	-61	Subtracted from total count
	Companies without sector information	-14	Subtracted from total count
	Companies investigated	326	
2009 to 2022	Initial number of observations (year-company)	4564	
	No information for variables	-1740	Subtracted from total observations
	Negative EBIT	-918	Subtracted from total observations
	Observations with ETR less than 0 or more than 1	-276	Subtracted from total observations
	Final sample	1630	

Source: Prepared by the authors

The exclusion of financial sector companies and those with negative pre-tax results aligns with our theoretical framework, focusing on non-financial entities and ensuring comparability within the sample.

3.2 Data Collection

After selecting the companies listed on B3, we used the Economática® database for data collection due to the reliability and comprehensiveness of the available financial information. However, due to the unavailability of data from the Value-Added Statements (VAS) on the Economática platform, it was necessary to acquire these statements through direct access to the COMDINHEIRO database to ensure that the required information was obtained for the CVATR proxy variable used in this study. These databases were chosen for their comprehensive coverage of Brazilian companies, ensuring that our constructs accurately reflect the phenomena under study in the Brazilian context.

Then, the data were arranged in a balanced panel format and submitted to statistical treatment using STATA 17 software. To ensure the reliability of the results and avoid the influence of outliers, all variables were adjusted using the 1% two-tailed winsorization technique (Martinez & Silva, 2018).

3.3 Econometric Model and Variables

3.3.1 Econometric Model

This econometric model is designed to directly test our hypothesis (H1), as outlined in section 2.6, linking tax aggressiveness to corporate financialization in Brazilian companies. The main objective of this empirical analysis was to investigate the impact of tax aggressiveness on corporate financialization in the Brazilian context and to test the research hypothesis presented in section 2.6. To achieve this objective, an econometric model adapted from Zhu et al. (2023) was developed, to which two tax aggressiveness variables were added: the Effective Tax Rate (ETR) and the Comprehensive Value-Added Tax Rate (CVATR)—including the CVATR variable proved essential since the other proxies were insufficient to cover the total tax burden of Brazilian companies. This approach allowed for a more in-depth analysis of tax policies in the Brazilian economy.

The regression model used to test the proposed hypothesis was presented in equation 1:

$$\mathrm{CorpFin_{it}} = \beta_0 + \beta_1\,\mathrm{TaxAgg} + \beta_2\,\mathrm{ROA_{it}} + \beta_3\,\mathrm{Lev_{it}} + \beta_4\mathrm{Size_{it}} + \beta_5\mathrm{TOP_{it}} + \beta_6\mathrm{Cash_{it}} + \beta_7\mathrm{Seg_{it}} + \beta_8\mathrm{StateOwn_{it}} + \mathrm{firms} + \mathrm{Year} + \varepsilon_{it} \quad (1)$$

CorpFin is the dependent variable, represented by the proxy of corporate financialization, for the firm I in year t. The proposed model aims to test the hypothesis (H1), exploring the influence of the independent variable β1, composed of the tax aggressiveness proxies BTDA, ETR, and CVATR, on the corporate financialization of companies listed on B3.

Additionally, the model incorporates a set of control variables β2 to β8, based on the recommendations proposed by Zhu et al. (2023) and Zou and Zhang (2023).

3.3.2 Dependent Variable

a) Corporate Financialization (CorpFin)

The dependent variable CorpFin is employed to assess the level of corporate financialization in firms, indicating the extent to which firms engage in financialization activities.

In this study, the financialization of companies is quantified according to the criteria established by Su and Liu (2021) and Zhu et al. (2023). To this end, financial assets are marketable, available-for-sale, derivatives, advances, held-to-maturity investments, and real estate held for investment, as well as cash equivalents and short-term investments. (Su & Liu, 2021; Zhu et al., 2023).

To eliminate the influence of firm size, its measurement is represented through a proxy, which is calculated as the ratio of total financial assets to total assets. This approach is described in recent studies by Su & Liu (2021) and Zhu et al. (2023). Equation 2 below presents the calculation of this proxy:

$$\mathrm{CorpFin}_{it} = \frac{\mathrm{FinancialAssets}_{it}}{\mathrm{TotalAssets}_{it}} \quad (2)$$

Where:

$\mathrm{CorpFin}_{it}$ = Corporate financialization of company i in year t;

$\mathrm{FinAsset}_{it}$ = Financial Assets of firm i in year t;

$\mathrm{TotalAsset}_{it}$ = Total Assets of company i in year t.

This proxy is particularly relevant for Brazilian companies, reflecting the unique aspects of financialization in an emerging market context.

3.3.3 Independent Variable

a) Tax Aggressiveness (TaxAgg)

To measure tax aggressiveness, three proxies were adopted: Abnormal Book Tax Differences (BTDA), Effective Tax Rate (ETR), and Comprehensive Value-Added Tax Rate (CVATR). The choice of these proxies was based on the intention to obtain a complete assessment of tax aggressiveness, covering different aspects of the tax behavior of organizations. Below, the proxies are presented together with their respective equations:

- Abnormal Book Tax Differences (BTDA)

According to Zhu et al. (2023), the Abnormal Book Tax Differences (BTDA) indicator is a proxy measure that uses the residual resulting from an ordinary least squares (OLS) regression applied to the Book Tax Differences (BTD), according to the equation 3. When firms engage in more aggressive tax activities, the residuals increase, indicating growth in discretionary accruals. This approach allows us to identify more effectively possible discretionary practices related to taxation compared to the normal BTD.

Equation 3 is employed to calculate the BTDA proxy, requiring ordinary least squares regression as an essential step:

$$\mathrm{BTD_{it}} = \alpha \mathrm{TACC_{it}} + \mu_\mathrm{i} + \varepsilon_\mathrm{it} \qquad (3)$$

Where:

α = Constant of the regression;

$\mathrm{BTD_{it}}$ = Book Tax Differences of the company i in year t, measured by the formula:

$$\mathrm{BTD_{it}} = \frac{\mathrm{PBIT_{it}} - (\mathrm{CIT_{it}}\ /0{,}34)}{\mathrm{TotalAsset_{it}}}$$

$\mathrm{TACC_{it}}$ = Total accruals of company i in year t, measured by the difference between net income and net cash flow from operations;

$\mathrm{PBIT_{it}}$: Profit Before Interest and Taxes;

CIT_{it}: Corporate Income Tax;

($\mu_i + \varepsilon_{it}$) = Residual from the regression, interpreted as a measure of tax aggressiveness, were adjusted to account for fixed effects in the model, ensuring that idiosyncratic variations at the individual level were duly considered.

- Effective Tax Rate (ETR)

The ETR (Effective Tax Rate) is a proxy used to assess the tax burden of companies and identify possible tax aggressiveness practices (Martinez & Silva, 2018). When the ETR is lower than the nominal rate, the company is proposed to adopt tax reduction strategies (Martinez & Silva, 2018; Wang et al., 2020). This indicator is calculated by the sum of IRPJ and CSLL divided by profit before income tax (LAIR) (Wang et al., 2020; Alcântara et al., 2023).

Importantly, differences between the ETR and the nominal tax rate may arise due to variations in how income is measured following accounting standards and tax rules (Wang et al., 2020).

Thus, ETR is an important indicator to assess a company's tax burden (Wang et al., 2020). To calculate the ETR proxy, formula four is presented:

$$\mathrm{ETR}_{\mathrm{it}} = \frac{\mathrm{CIT}_{\mathrm{it}}}{\mathrm{PBIT}_{\mathrm{it}}} \tag{4}$$

Where:

$\mathrm{ETR}_{\mathrm{it}}$ = Effective Tax Rate of the company i in year t;

$\mathrm{CIT}_{\mathrm{it}}$ = Corporate Income Tax of company i in year t;

$\mathrm{PBIT}_{\mathrm{it}}$ = Profit Before CIT of company i in year t.

- Comprehensive Value-Added Tax Rate (CVATR)

CVATR is widely used in Brazil to assess tax aggressiveness (Martinez, 2017). This measure considers both taxes on profit and turnover, which are essential to the national tax burden (Chiachio & Martinez, 2019; Alcântara et al., 2023).

In addition to taxes on profit and social contribution, CVATR also incorporates other federal, State, and municipal taxes, called indirect taxes (Alcântara et al., 2023). The calculation of CVATR is obtained through the relationship between the total taxes and levies presented in the SVA (Statement of Value Added) and the total value added (Martinez & Silva, 2018).

In summary, CVATR represents a wide-ranging metric for assessing tax aggressiveness in the Brazilian context since it encompasses the total tax burden on a company. The interpretation of this measure reveals that the lower the value attributed to CVATR, the greater the tax aggressiveness demonstrated by the company (Chiachio & Martinez, 2019).

Equation 5 is used to calculate the CVATR proxy:

$$\mathrm{CVATR}_{\mathrm{it}} = \frac{\text{Tax Burden on SVA}_{\mathrm{it}}}{\text{Total Value Added to Share}_{\mathrm{it}}} \quad (5)$$

Where:

$CVATR_{it}$ = Comprehensive Tax rate on Value Added of the company i in year t;

$Tax\ Burden\ on\ SVA_{it}$ = Total taxes from firm i's SVA in year t;

$\text{Total Value Added to Share}_{\mathrm{it}}$ = Total Distributable Value Added from the SVA of company i in year t.

These proxies were selected for their relevance in capturing tax aggressiveness in the Brazilian corporate environment, reflecting both global and local tax practices.

3.3.4 Control Variables

In this study, the Brazilian basic interest rate, SELIC, was initially included in the model to analyze its possible influence on the relationship between tax aggressiveness and corporate financialization, based on notes by Kaltenbrunner and Painceira (2017). However, no statistical significance was found for the SELIC variable in any of the models after statistical analysis. Therefore, it was decided to exclude it from the control variables, simplifying the research and using only the variables already widely addressed in the literature.

Thus, among the relevant metrics pointed out by Su and Liu (2021), Yang and Li (2023), and Zhu et al. (2023), the following stand out:

a) Return on Assets (ROA) - evaluates the profitability of investments in relation to the capital applied, obtained by dividing the pre-tax operational profit by the previous year's total assets (Martinez & Silva., 2018).

b) Leverage (LEV) and Firm Size (SIZE) - LEV is the leverage ratio, measured by total debt over total assets for the previous year, while SIZE is the natural logarithm of total assets (Wang et al., 2020).

c) Ownership of the largest shareholder (TOP) - indicates the percentage of the largest shareholder, and CASH represents the ratio of free cash flows to the firm's total assets (Zhu et al., 2023).

d) Dummy variables - SEG is equal to 1 if the firm is a Novo Mercado firm and 0 otherwise, and STATEOWN is a dummy with a value equal to 1 if the firm is a state-owned firm and 0 otherwise (Lopo Martinez & Da Silva, 2023; Martinez & Motta, 2020).

Each control variable was carefully selected based on its theoretical relevance and its ability to provide insights into the Brazilian corporate landscape, ensuring a robust analysis of the relationship between tax aggressiveness and corporate financialization. Table 2 shows the variables used in the model, indicating their formulas, expected behavior, and theoretical basis.

Table 2

Table of variable of interest

DEPENDENT VARIABLE				
Acronym	Description	Calculation formula	Description	Previous research
CorpFin	*Corporate Financialization*	(Marketable financial assets + available-for-sale financial assets + derivatives + advances + held-to-maturity investments + real estate held for investment) / Total Assets	Level of corporate financialization	Su and Liu (2021); Yang and Li (2023); Zhu et al. (2023)
INDEPENDENT VARIABLES				
Acronym	Description	Calculation formula	Behavior	Previous research
BTDA	*Abnormal Book Tax Differences*	$BTD_{it} = \alpha TACC_{it} + \mu_i + \varepsilon_{it}$	+	Martinez and Silva (2018); Chiachio and Martinez (2019); Wang et al. (2020); Su and Liu (2021); Zhu et al. (2023)
ETR	*Effective Tax Rate*	(CIT expense) / PBIT	-	
CVATR	Effective Tax Rate on Added Profit	Tax burden of SVA / Value added total to be distributed	-	
CONTROL VARIABLES				
Acronym	Description	Calculation formula	Behavior	Previous research
ROA	Return on Assets	LAIR / Total Assetst-1	+	Wang et al. (2020); Su and Liu (2021); Yang and Li (2023); Zhu et al. (2023) Lopo Martinez & Da Silva,(2023)
LEV	Leverage	Total Debt / Total Assets	-	
SIZE	Company Size	Natural logarithm of total assets	-	
TOP	Shareholding of the largest shareholder	Number of shares / Total shares	-	
CASH	Cash Level	Net Cash Flow / Total Assets	+	
SEG	Bovespa Listing Segment *(dummy)*	*Dummy* variable that assumes 1 for the New Market Segment and 0 for the others.	-	
STATE	Company Ownership Right *(dummy)*	*Dummy* variable that assumes 1 for state-owned enterprises and 0 for the others.	-	

Source: adapted from Martinez and Silva (2018); Chiachio and Martinez (2019); Wang et al. (2020); Su and Liu (2021); Yang and Li (2023); Zhu et al. (2023).

4 RESULTS

4.1 Presentation of Results

This part will present the descriptive statistics, the correlation matrix, the regression results and a robustness test.

4.1.1 Descriptive Statistics

The descriptive statistics in Table 2 provide a comprehensive overview of the selected companies from 2009 to 2022. In addition, it includes indicators such as the number of observations, mean, standard deviation, and quartiles, providing a complete view of the data distribution. Minimum and maximum values will also be highlighted, representing the extremes of the sample.

Table 3

Descriptive statistics of the variables

Variable	Obs.	Average	Standard deviation	Min	P25	P50	P75	Max
CORPFIN	1630	0,2344	0,1667	0,0237	0,1305	0,1890	0,2864	0,9558
BTDA	1630	0,0320	0,0406	-0,0423	0,0070	0,0226	0,0440	0,1897
ETR	1630	0,2433	0,1385	0,0009	0,1427	0,2412	0,3143	0,7326
CVATR	1630	0,3033	0,1626	0,0052	0,1952	0,2754	0,3793	0,7496
ROA	1630	0,0720	0,0563	0,0088	0,0323	0,0585	0,0944	0,3126
LEV	1630	0,5778	0,2974	0,0939	0,4327	0,5615	0,6797	2,3425
SIZE	1630	14,8936	1,7962	10,7335	13,7072	14,9936	16,1642	19,0027
TOP	1630	0,3948	0,2299	0,0515	0,2325	0,3403	0,5242	0,9980
CASH	1630	0,0135	0,0613	-0,1528	-0,0137	0,0059	0,0384	0,2611
SEG	1630	0,5534	0,4973	0,0000	0,0000	1,0000	1,0000	1,0000
STATE	1630	0,0325	0,1774	0,0000	0,0000	0,0000	0,0000	1,0000

Source: Prepared by the authors

Table 3 indicates that Brazil's nonfinancial companies have an average corporate financialization (CORPFIN) of 23.44%. This is higher than the 2.79% and 2.35% found in studies by Su and Liu (2021) and Zhu et al. (2023), respectively. For 75% of these companies, 28.64% of total assets are financialized, as opposed to 31.40% in Su and Liu (2021) and 33.60% in Zhu et al. (2023).

The average value of the BTDA variable was 3.2%, suggesting lower taxable profits. The ETR and CVATR variables averaged at 24.33% and 30.33%, both below Brazil's theoretical tax rate of 34%. These findings are consistent with prior studies by Cabello et al. (2019), Chiachio and Martinez (2019), and Marques et al. (2022), which also found reduced tax rates.

Control variables showed a 7.2% average ROA and a 57.78% leverage ratio (LEV), indicating moderate indebtedness. Share concentration (TOP) was 39.48%. Cash levels

(CASH) averaged at 1.35%. About 55.34% of the firms are in the Novo Mercado (SEG) segment, known for high governance standards, and 3.25% are state-owned.

4.1.2 Correlation Matrix

Table 4 shows Pearson and Spearman correlations between variables. The BTDA metric negatively correlates with tax aggressiveness metrics ETR and CVATR, aligning with existing literature. BTDA also positively correlates with corporate financialization at a 99% confidence level, supporting Zhu et al.'s (2023) findings of a link between tax aggressiveness and financialization. CORPFIN negatively correlates with ETR and CVATR at 99% confidence for Pearson and 95-99% for Spearman, suggesting financialization increases as tax aggressiveness decreases. Spearman's correlation was employed due to its suitability for the non-parametric nature of our data, ensuring more accurate analysis of the relationships between variables.

Table 4

Pearson and Spearman Correlation

Var.	CORPFIN	BTDA	ETR	CVATR	ROA	LEV	TAMANHO	TOP	DINHEIRO	SEG	ESTADO
CORPFIN	1	0,107***	-0,059**	-0,126***	0,138***	-0,141***	-0,131***	0,046*	0,248***	-0,076***	-0,045*
BTDA	0,201***	1	-0,827***	-0,210***	0,653***	-0,255***	-0,015	0,004	-0,011	-0,010	-0,049**
ETR	-0,104***	-0,707***	1	0,305***	-0,302***	0,198***	-0,014	0,021	0,017	-0,018	0,038
CVATR	-0,169***	-0,244***	0,247***	1	0,003	0,058**	0,103***	0,129***	0,011	-0,128***	0,151***
ROA	0,217***	0,688***	-0,306***	-0,083***	1	-0,290***	-0,166***	0,034	0,006	-0,110***	-0,041*
LEV	-0,134***	-0,122***	0,110***	0,045**	-0,083***	1	0,270***	-0,079***	0,069***	0,085***	-0,018
TAMANHO	-0,224***	-0,079***	-0,012	0,166***	-0,218***	0,012	1	-0,081***	0,003	0,267***	0,214***
TOP	0,158***	0,035	-0,008	0,124***	0,066***	-0,072***	-0,122***	1	-0,004	-0,195***	-0,018
DINHEIRO	0,193***	-0,020	0,006	-0,007	0,005	0,031	-0,025	0,017	1	0,002	-0,033
SEG	-0,145***	-0,016	-0,009	-0,131***	-0,128***	-0,031	0,280***	-0,255***	0,022	1	-0,121***
ESTADO	-0,062**	-0,063**	0,027	0,178***	-0,059**	0,031	0,228***	-0,012	-0,030	-0,121***	1

Note 1: Correlations between variables in the white and gray area using Pearson and Spearman coefficients, respectively.
Note 2: Statistically significant values were indicated by ***, **, and *, corresponding to significance levels of 1%, 5%, and 10%, respectively.
Source: Survey data.

4.1.3 Regression Result

To test the study's hypothesis, we used a fixed effects model adapted from Su and Liu (2021) and Zhu et al. (2023). A 1% significance level in the Hausman test confirmed this choice. Each tax aggressiveness proxy—BTDA, ETR, CVATR—was analyzed separately using Stata.

Table 5 shows regression results linking corporate financialization to tax aggressiveness. Column (1) reveals a positive coefficient of 0.4974 (p < 1%) for BTDA, indicating higher tax aggressiveness increases financialization. Column (2) for ETR shows a negative coefficient of -0.0566 (p < 10%), suggesting lower ETR increases financialization. Column (3) for CVATR shows a negative coefficient of -0.1526 (p < 1%), reinforcing this relationship. The F-test confirmed the statistical significance of all proxies, validating the regression model's predictive power.

Table 5

CorpFin Multiple Linear Regression

MODEL*:* $\mathrm{CorpFin}_{it} = \beta_0 + \beta_1\,\mathrm{TaxAgg}_{it} + \beta_2\,\mathrm{ROA}_{it} + \beta_3\,\mathrm{LEV}_{it} + \beta_4\mathrm{SIZE}_{it} + \beta_5\mathrm{TOP}_{it} + \beta_6\mathrm{CASH}_{it} + \beta_7\mathrm{Seg}_{it} + \beta_8\mathrm{StateOwn}_{it} + \mathrm{Firm} + \mathrm{Year} + \varepsilon_{it}$

Variable	CORPFIN (1)	CORPFIN (2)	CORPFIN (3)
BTDA	0,4974***	-	-
ETR	-	-0,0566*	-
CVATR	-	-	-0,1526***
ROA	0,1986**	0,4058***	0,4268***
LEV	-0,0685***	-0,0705***	-0,0686***
SIZE	-0,0154***	-0,0150***	-0,0120***
TOP	0,0685***	0,0692***	0,0820***
CASH	0,5365***	0,5308***	0,5289***
SEG	-0,0260***	-0,0243***	-0,0308***
STATE	-0,0077	-0,0100	0,0046
CONST.	0,4536***	0,4627***	0,4461***
Obs.	1630	1630	1630
Year	Yes	Yes	Yes
Company	Yes	Yes	Yes
Value F	38,09***	36,51***	41,70***
R-sq: within	0,1592	0,1536	0,1717
Prob>chi2	0,0000	0,0000	0,0000
VIF	1,33	1,12	1,11

Note: Significance at 1% (*******), 5% (****),** and 10% (*****) levels. Non-significant variables were p-value more significant than 10%.
Source: Prepared by the authors

The CVATR model explains about 17.17% of the variation, outperforming other models. Table 5 suggests tax strategies impact companies' financialization on B3. Variance inflation factors (VIF) show no significant multicollinearity. This supports Martinez and Silva's (2018) claim that CVATR is a suitable tax aggressiveness metric in Brazil.

The results align with Zhu et al. (2023), confirming our hypothesis (H1) that higher tax aggressiveness correlates with increased corporate financialization in Brazil. Control variables like ROA, TOP, and CASH show a positive link to financialization, differing from Zhu et al.'s findings.

Variables like leverage (LEV), firm size (SIZE), and participation in New Market Segment (SEG) negatively correlate with financialization, consistent with Su and Liu (2021) and Zhu et al. (2023). However, unlike previous research, state-owned firms showed no specific relationship to financialization in the Brazilian context.

4.1.4 Robustness test

In the robustness test of the results of the regressions that considered tax aggressiveness as one of the determinants of corporate financialization, alternative measures of the tax aggressiveness proxies BTDA, ETR, and CVATR were used as dummy variables, as shown in Table 6.

The first dummy variable was based on the BTDA metric, with the fourth quartile as a reference, assigning the value 1 to represent the most tax-aggressive companies and the value 0 for the others.

The ETR and CVATR dummy variables, the first quartile was used as a reference, representing a value below 25% of the observations. This choice was based on the premise that companies with ETR or CVATR values in this quartile have a lower effective tax rate or value-added tax than other companies, indicating greater tax aggressiveness in tax planning (Chiachio & Martinez, 2019). Thus, the value one was assigned to companies with lower ETR and CVATR, indicating greater tax aggressiveness, and the value 0 to the others.

When replacing the independent variables BTDA, ETR, and CVATR with their corresponding dummies in columns (1), (2), and (3), respectively, the results showed consistency with coefficients of 0.0334 (BTDAdummy), -0.0440 (ETRdummy) and -0.0552 (CVATRdummy). The analysis revealed that the tax aggressiveness dummies also showed significant positive (negative) associations (p < 1%) with corporate financialization, including the ETR metric. Furthermore, the results showed that the assigned tax aggressiveness dummies were statistically significant in the F-test, supporting hypothesis H1.

Table 6

Regression results with alternative measurements

MODEL: $CorpFin_{it} = \beta_0 + \beta_1 TaxAgg(dummy)_{it} + \beta_2 ROA_{it} + \beta_3 LEV_{it} + \beta_4 SIZE_{it} + \beta_5 TOP_{it} + \beta_6 CASH_{it} + \beta_7 Seg_{it} + \beta_8 StateOwn_{it} + Firm + Year + \varepsilon_{it}$

Variable	CORPFIN (1)	CORPFIN (2)	CORPFIN (3)
$BTDA_{dummy}$	0,0334***	-	-
ETR_{dummy}	-	-0,0440***	-
$VATR_{dummy}$	-	-	-0,0552***
ROA	0,3108***	0,4027***	0,4330***
LEV	-0,0704***	-0,0697***	-0,0714***
SIZE	-0,0150***	-0,0145***	-0,0136***
TOP	0,0710***	0,0720***	0,0784***
CASH	0,5382***	0,5351***	0,5380***
SEG	-0,0239***	-0,0250***	-0,0255***
STATEOWN	-0,0069	-0,0048	-0,0001
CONST.	0,4460***	0,4729***	0,4650***
Obs.	1630	1630	1630
Year	Yes	Yes	Yes
Company	Yes	Yes	Yes
F-value	37,44***	39,55***	41,68***
R-sq: within	0,1569	0,1643	0,1717
Prob>chi2	0,0000	0,0000	0,0000
VIF	1,19	1,09	1,09

Note: Significance at 1% (*******), 5% (****),** and 10% (*****) levels. Non-significant variables were p-value more significant than 10%.
Source: Prepared by the authors

The results show a positive link between control variables ROA, TOP, and CASH and corporate financialization, differing from Zhu et al. (2023). Other variables like LEV, SIZE, and STATEOWN align with Su and Liu (2021) and Zhu et al. (2023). No evidence supported a significant link between corporate financialization and control rights for state-owned firms in Brazil.

A new VIF test confirmed no multicollinearity issues. The use of tax aggressiveness dummies enhanced our understanding and validated the study's findings, supporting hypothesis H1. Overall, the results highlight tax aggressiveness' role in corporate financialization dynamics.

4.2 Discussion of Results

The analysis conducted offers a detailed look into how tax aggressiveness intersects with corporate financialization among Brazilian companies. Notably, the average rate of corporate financialization among Brazilian nonfinancial companies stands at 23.44%. This is substantially higher than the rates found in other studies such as those by Su and Liu (2021) and Zhu et al. (2023), which report rates of 2.79% and 2.35%, respectively.

The disparity is further magnified when comparing the upper quartiles, with Brazilian companies showing a corporate financialization rate up to 28.64% of total assets. Tax variables like BTDA, ETR, and CVATR reveal that these firms are also aggressive in their tax planning. For instance, the ETR and CVATR variables average at 24.33% and 30.33%, which are below the theoretical tax rate in Brazil of 34%.

Previous studies by Cabello et al. (2019) and Marques et al. (2022) have noted similar discrepancies between the taxes paid and the theoretical rate. The control variables also yield interesting findings. For example, the ROA averages at 7.2% while the leverage ratio is at 57.78%, indicating moderate indebtedness. Interestingly, the concentration of shares, represented by the TOP variable, stands at 39.48%, pointing towards a skewed distribution of share ownership.

Additionally, 55.34% of these companies are part of the Novo Mercado (SEG) segment, which is known for transparent operations and excellent governance, and only 3.25% are state-owned. Cash availability for these firms is relatively low, averaging around 1.35%.

Correlation analyses, using both Pearson's and Spearman's methods, further illuminate the relationship between tax aggressiveness and corporate financialization. For example, the negative correlation between the BTDA variable and other tax metrics aligns well with existing literature. Furthermore, the fixed effects model employed in the regression analysis, as suggested by the Hausman test, provided robust results, all run using Stata 17 software.

The results from this regression analysis confirm that the relationship between corporate financialization and tax aggressiveness is significant, and this holds true for all tax aggressiveness proxies. Among these, the CVATR variable showed the most explanatory power, reaffirming the assertions made by Martinez and Silva (2018).

The main conclusion drawn from the study is that tax planning activities have a notable impact on a company's level of financialization. Unlike findings from studies by Su and Liu (2021) and Zhu et al. (2023), Brazilian companies exhibit unique characteristics such as high levels of ownership concentration, prevalence of family-controlled business groups, and complex cross-holdings between industrial and financial affiliates, which shape their financial behavior in distinct ways.. The research is further strengthened by robustness tests, which employed alternative measures for tax aggressiveness and confirmed the initial findings.

Therefore, this analysis offers a holistic understanding of the complex relationship between corporate financialization and tax aggressiveness within the Brazilian context. It not only confirms the research hypothesis but also opens new avenues for studying corporate financial behavior in emerging markets.

5 CONCLUDING REMARKS

In the intricate and perpetually metamorphic domain of international financial systems, elucidating the nexus between fiscal belligerence and corporate financialization assumes an exigent prominence. In this endeavor, our scholarly investigation, undergirded by empirical rigor, centers on a longitudinal analysis of Brazilian firms spanning the period from 2009 to 2022. This inquiry offers a seminal contribution to extant literature by operationalizing a multiple linear regression framework on panel data, assiduously controlling for both firm-specific and temporal idiosyncrasies.

A focal point of our investigation pertains to the relatively underemphasized concept of corporate financialization. To navigate the labyrinthine contours of tax aggressiveness, we invoked an array of salient metrics, such as Abnormal Book-Tax Differences (BTDA), Effective Tax Rates (ETR), and the pioneering Comprehensive Value-Added Tax Rate (CVATR). Augmenting the robustness of our analytical paradigm, a host of control variables were integrated, encompassing Leverage (LEV), Return on Assets (ROA), Firm Size (SIZE), Ownership Concentration (TOP), Liquidity (CASH), Business Segmentation (SEG), and State Ownership (STATEOWN).

Our systematic interrogation, enacted through three distinct regression models, unveiled a sophisticated interrelationship between fiscal aggressiveness metrics and their control variable counterparts. Hypothesis One (H1) posited an unambiguous cause-and-effect dynamic, articulated via BTDA, ETR, and CVATR indices. The empirical outcomes unerringly corroborated the hypothesis; as corporations adopted increasingly militant tax strategies, a concomitant amplification in corporate financialization was discernible, with CVATR materializing as a compelling explanatory variable.

The integration of CVATR, adeptly calibrated to traverse Brazil's complex multi-tiered tax system—encompassing federal, state, and municipal jurisprudence—constitutes an innovative methodological advance. Thus, our work serves to fill a conspicuous void in academic discourse by tailoring its scope to the idiosyncrasies of Brazil's distinct fiscal and financial ecosystem.

The methodological rigor was further buttressed through the utilization of dummy variables as surrogate indicators for BTDA, ETR, and CVATR, thereby enhancing the external validity of our findings. Our results illuminated that Brazilian corporate entities manifesting elevated levels of tax aggressiveness invariably exhibit an ascendant trajectory toward amplified corporate financialization.

The innovative dimension of our research is substantiated in its capacity to illuminate a hitherto unexplored conceptual terrain. Specifically, in jurisdictions such as Brazil, characterized by a consumption-tax centric architecture, aggressive tax stratagems appear to catalyze a proliferative efflorescence in corporate financialization. This observation assumes a critical salience, particularly within the context of Brazil's unique financial and taxational paradigms.

However, a commitment to intellectual rigor necessitates the acknowledgment of certain constraining factors. Despite leveraging formulaic approaches gleaned from seminal studies—Su and Liu (2021), Yang and Li (2023), and Zhu et al. (2023)—inherent discrepancies remain inescapable. Moreover, the circumscribed corporate representation within Brazil's B3 exchange warrants circumspect comparisons with more expansive global financial markets.

Looking forward, we advocate for granular, sector-specific dissections of the interplay between fiscal aggressiveness and corporate financialization within the ambit of Brazil's B3 exchange. Such scholarly endeavors will indubitably serve to deepen our collective understanding, offering invaluable insights to academics, industry connoisseurs, and policy architects operating at the confluence of economics, finance, and fiscal policy. Furthermore, assessing the broader societal ramifications of financialization, especially when framed through the optics of tax incentives, bears the potential to inform and shape policy directives, guiding them towards pathways of equitable and sustainable economic proliferation.

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REVISTA CONTABILIDADE, GESTÃO E GOVERNANÇA
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Agressividade Tributária e Financeirização Corporativa no Brasil

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RESUMO

Objetivo: *Este estudo investiga a relação entre agressividade fiscal e financeirização corporativa em empresas listadas na Bolsa de Valores B3 do Brasil de 2009 a 2022.*
Método: *A amostra é composta por 1.630 observações empresa-ano após a exclusão de empresas financeiras, empresas com resultado antes de impostos negativo e outliers. Utilizamos um modelo de regressão linear em painel, ajustando para efeitos fixos relacionados a empresas individuais e anos específicos. Utilizamos métricas como diferenças de impostos contábeis anormais (BTDA), alíquota efetiva de impostos (ETR) e Alíquota Abrangente de Impostos sobre Valor Agregado (CVATR) para medir a agressividade fiscal.*
Originalidade/Relevância: *Este estudo é pioneiro na exploração do nexo entre agressividade tributária e financeirização corporativa no Brasil, oferecendo insights críticos para pesquisadores, investidores, formuladores de políticas públicas e analistas financeiros locais que buscam decifrar as nuances da financeirização e do planejamento tributário no singular cenário econômico do Brasil. As abordagens inovadoras propostas para quantificar ativos financeiros fornecem avanços analíticos de valor inestimável adaptados às condições únicas de mercado do país.*
Resultados: *Nossos resultados mostram uma correlação positiva entre a agressividade fiscal e a financeirização corporativa. As empresas que empregam estratégias fiscais agressivas apresentaram maior financeirização. Para fins de robustez, foram introduzidas variáveis fictícias direcionadas a empresas com tributação agressiva, confirmando a relação inicial. O CVATR surgiu como uma métrica particularmente eficaz no contexto brasileiro devido à sua complexa estrutura tributária.*
Contribuições Teóricas/Metodológicas: *Nossa pesquisa apresenta abordagens inovadoras para medir ativos financeiros adaptados às condições únicas do mercado brasileiro. Ela também enriquece o corpo atual da literatura ao confirmar que o CVATR é uma métrica eficaz para capturar a agressividade fiscal no Brasil.*

Palavras-Chave: *Agressividade fiscal, financeirização corporativa, Bolsa de Valores da B3.*

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