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DO MANAGERS GET PAID FOR EARNINGS QUALITY? A STUDY ON ACCRUALS AND EXECUTIVE COMPENSATION

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1 Introduction

Accruals are a fundamental feature of financial reporting, aiming to align earnings with revenue recognition and matching principles. Under this framework, revenues are recorded when earned and expenses when incurred—regardless of cash flows—thus providing a more accurate picture of firm performance than cash-based measures alone. Nonetheless, this system introduces complexity. As noted by Dechow (1994), while cash flows ultimately determine a firm's long-term sustainability, short-term cash measures may fail to reflect underlying economic performance due to timing and matching issues, such as in the case of credit sales. Accruals were developed to mitigate these distortions and enhance the quality of earnings. However, the flexibility inherent in accrual accounting gives managers considerable discretion, raising the possibility of earnings management (Healy, 1985; Dechow et al., 1995).

This discretionary use of accruals is particularly relevant in the context of executive compensation. As emphasized by agency theory (Jensen & Meckling, 1976), the separation of ownership and control creates incentives for managers to act in their own interest, especially when compensation packages are tied to accounting performance metrics. When managerial pay depends on reported earnings, executives may be motivated to use accruals not merely to reflect economic reality, but to influence their own remuneration (Jensen & Murphy, 1990).

In this context, discretionary accruals, those not driven by business fundamentals, may serve as a mechanism for opportunistic behavior, allowing executives to boost performance indicators and, consequently, increase their compensation (Dechow et al., 1995; Kothari et al., 2005). However, governance mechanisms such as board independence and firm-level characteristics like size and leverage may play a moderating role in this dynamic, potentially restraining the use of earnings management for personal gain.

Given this backdrop, this study aims to investigate whether accruals, both total and discretionary, are associated with different components of executive compensation, including base salary, bonuses, and equity-based pay. Specifically, we examine whether higher accruals are linked to increased compensation, and whether corporate governance variables mitigate this relationship. By exploring these associations, we contribute to the literature on earnings quality, managerial incentives, and corporate governance effectiveness.

2 Theoretical Issues

2.1 Corporate Governance and Agency theory

Corporate governance theory is rooted in the classical problem of ownership and control separation in large corporations. As highlighted in the seminal work of Berle and Means (1932), this separation leads to situations where ownership is dispersed among many shareholders, while actual control remains in the hands of a few professional managers. The lack of direct shareholder oversight creates fertile ground for conflicts of interest, which may ultimately affect firm performance and valuation. Later reflections on this issue by the same authors (Berle & Means, 1984) reinforced the notion that ownership structure plays a crucial role in corporate governance outcomes.

Rather than focusing solely on ownership dispersion, more recent research has emphasized the role of governance mechanisms in curbing managerial opportunism. For example, the works of Shleifer and Vishny (1997) and La Porta et al. (2000) interpret the evolution of corporate governance in the U.S. as a response to managerial expropriation of

shareholder wealth. According to this view, governance structures emerged to protect investors from abuses such as the misallocation of resources, excessive executive compensation, and self-serving behavior.

Mechanisms of governance are designed to align the interests of insiders—managers and controlling shareholders—with those of external stakeholders. Shleifer and Vishny (1997) define corporate governance as a set of tools by which external financiers, such as shareholders and creditors, safeguard their investments from managerial expropriation. These tools include legal protections, transparency requirements, and incentive structures, all aimed at reducing information asymmetry and mitigating agency problems.

Agency theory, which provides the theoretical underpinning for much of corporate governance research, posits that principal-agent conflicts arise from differences in goals and risk preferences between shareholders (principals) and managers (agents). One of the proposed solutions to such conflicts involves the design of compensation contracts that encourage agents to act in the principal's best interest. These contracts either tie remuneration to performance outcomes or establish clear monitoring protocols to discourage self-serving decisions (Shleifer & Vishny, 1997).

In the context of widely held corporations, agency problems are particularly acute. As ownership becomes more dispersed, shareholders often lack the power or incentive to monitor managers directly. This reality underscores the importance of governance structures that enforce accountability and transparency (Nassif & Souza, 2013). Among the available mechanisms, executive compensation stands out as a key lever for aligning managerial behavior with shareholder interests, particularly when designed to reward long-term value creation.

2.2 Executive Compensation

The structure of executive compensation is a central component of corporate governance systems. It plays a dual role: rewarding managerial talent while also serving as a mechanism to align executives' incentives with those of shareholders. According to agency theory, the primary challenge in this context is to resolve the inherent conflict of interest between principals and agents. Compensation arrangements are one of the main tools through which this resolution is pursued (Jensen & Meckling, 1976).

Tirole (2006) categorizes executive incentives as either explicit or implicit. Explicit incentives are contractually defined and performance-based, whereas implicit incentives stem from informal pressures or career concerns. Both play a role in shaping managerial decision-making and risk appetite.

From a practical perspective, executive pay typically includes a mix of fixed salary, performance-based bonuses, and equity-linked incentives. Berk and DeMarzo (2010) note that among these, performance-based bonuses are the most straightforward explicit incentive, often tied to metrics such as earnings growth or return on assets. However, Sonza and Kloeckner (2014) argue that bonuses and equity compensation are the most impactful components, as they directly link managerial rewards to company performance. The effectiveness of these incentives has been supported by earlier studies such as Jensen and Murphy (1990), which show a positive relationship between performance-based pay and shareholder returns.

On the implicit side, executives are often driven by reputational concerns and the desire for job security. Poor firm performance can trigger shareholder dissatisfaction, pressure from the board, or even dismissal. Tirole (2006) emphasizes that these implicit mechanisms, though less visible, still influence managerial behavior and can complement explicit contracts.

In practice, accounting-based measures of performance are widely used in executive compensation packages. Their appeal lies in the breadth of information they provide, encompassing the financial performance of the organization (Abernethy, 2013). In Brazil, the

Securities and Exchange Commission (CVM, 2009) allows executive compensation to be divided into fixed and variable components. The variable part may include bonuses, profit sharing, meeting fees, and commissions, while equity-based payments such as shares and options are typically treated as part of fixed compensation.

Recent empirical evidence has further refined our understanding of how compensation design interacts with other governance mechanisms. Li et al. (2019) report that accounting conservatism is positively associated with performance-based compensation, suggesting that boards reward CEOs who adopt more cautious accounting practices. Their findings support the view that accounting conservatism enhances the effectiveness of corporate governance by reducing information asymmetry.

Not all compensation practices, however, lead to improved financial performance. Cavaco et al. (2020) found that executive compensation programs incorporating Corporate Social Responsibility (CSR) criteria may dampen short-term financial results, even though they enhance non-financial outcomes such as customer relations and community engagement.

Compensation arrangements are also shaped by executives' risk-taking preferences. Islam et al. (2022), drawing on insights from Guthrie (2021), show that even in the absence of equity stakes, CEOs tend to pursue strategies that increase capital at risk if such behavior boosts their current compensation. This finding suggests that pay design must carefully balance risk incentives and performance alignment.

The complexity of CEO pay is further underscored by Oehmichen et al. (2020), who argue that while explicit compensation arrangements provide clear behavioral cues, they may also lead to unintended consequences, such as the underestimation of managerial contributions in successful strategies. The authors advocate for compensation structures that recognize both individual talent and external factors influencing firm performance.

Power dynamics also play a role in shaping executive pay. An extensive study by Song and Wan (2019) of S&P 500 firms from 1993 to 2012 finds that more powerful CEOs tend to earn significantly higher compensation. The justification offered is that this "power premium" reflects both the strategic value and bargaining power of highly influential executives, though it also raises concerns about rent extraction.

2.3 Accruals Management

Accruals play a central role in the understanding of earnings management practices. One of the foundational studies in this area, by Healy (1985), explores how bonus plans influence accounting decisions. The study finds that managers compensated based on bonus thresholds tend to adopt income-increasing accounting strategies when performance is near targets. Conversely, when targets are clearly unattainable, income-decreasing practices may be employed to defer earnings, increasing the likelihood of achieving future performance goals. Accruals, in this context, are defined as the difference between accounting earnings and operating cash flows, which are adjusted for changes in working capital items.

Firms were categorized by Healy into three groups depending on whether their earnings were above, below, or near the bonus contract thresholds. The study shows a higher incidence of negative accruals when performance is constrained by those thresholds, suggesting a clear link between accruals and managerial incentives. Additionally, Healy reports that voluntary changes in accounting policies were more frequent in the years following the implementation or modification of bonus schemes.

In a more refined approach, Jones (1991) introduced a model that distinguishes between discretionary and non-discretionary accruals. Total accruals are calculated as changes in current assets minus changes in cash, liabilities (adjusted for long-term debt and taxes), and depreciation/amortization. The model then uses revenues and gross property, plant, and

equipment as explanatory variables in a regression framework, with all variables scaled by total assets to control for firm size. The residuals from this regression serve as proxies for discretionary accruals.

The usefulness of accruals in performance measurement is further examined by Dechow (1994), who investigates whether earnings or cash flows better explain stock returns. The study, which uses data at quarterly, annual, and four-year frequencies, finds that earnings are more strongly associated with stock returns across all intervals. Notably, the explanatory power of cash flows improves with longer measurement periods, suggesting that accruals help mitigate timing mismatches inherent in raw cash flows. When firms are grouped by accrual magnitude, those with larger accruals show weaker correlations between cash flows and stock returns, reinforcing the notion that accrual-based earnings provide a more consistent performance measure.

To enhance the detection of earnings management, Dechow, Sloan, and Sweeney (1995) developed accruals-based models that explicitly separate discretionary and non-discretionary components. Rather than relying solely on total accruals, their approach incorporates an adapted version of the Jones model. A key methodological contribution was the use of total assets as a deflator, which became a standard in subsequent literature.

Evidence of systematic mispricing related to accruals, known as the accrual anomaly, was first documented by Sloan (1996). The study demonstrates that investors tend to overvalue the accrual component of earnings, leading to lower future stock returns for firms with high accruals. Using decile-sorted portfolios and CAPM regressions, the analysis reveals that high-accrual firms consistently underperform in the market. In addition, Jensen's alpha estimates show a U-shaped pattern of risk-adjusted returns across accrual deciles, indicating that market participants may fail to fully disentangle accruals from cash flow components when forming expectations.

Building on this, Dechow et al. (1998) argue that accruals play a stabilizing role by offsetting the volatility of operating cash flows, resulting in earnings that are less serially correlated. This helps explain why current earnings often serve as better predictors of future cash flows than current cash flows themselves.

Alternative scaling techniques for accruals are explored by Kim et al. (2015) in their study of the Korean stock market. Comparing traditional accruals (scaled by total assets) with percent accruals (scaled by earnings), they find that the latter provides stronger evidence of the accrual anomaly. CAPM and Fama-French regressions for sorted portfolios show that percent-scaled accruals are more effective in predicting future returns, highlighting the influence of deflator choice on empirical findings.

Longitudinal trends in the accrual-cash flow relationship are analyzed by Bushman et al. (2016), who report a dramatic decline in correlation between these components from the 1960s to the 2010s. Using models based on Dechow (1994) and Dechow & Dichev (2002), they show that the explanatory power of cash flows over accruals has decreased substantially, suggesting that commonly accepted assumptions about their relationship may no longer hold.

One possible explanation for this weakening relationship is the increasing relevance of intangible assets. Green et al. (2022) argue that investments in intangibles—often expensed rather than capitalized—distort traditional accrual measures. They critique the standard practice of deflating by book assets and propose adjustments using market value or modified book equity, especially for intangible-intensive firms with low recorded asset values.

A more recent contribution by Christensen et al. (2023) focuses on accrual quality in U.S. firms from 1990 to 2019. Using the Dechow and Dichev (2002) model, augmented by McNichols (2002), the study regresses current accruals on past, current, and future cash flows, alongside sales growth and gross PPE. Accrual quality is assessed via the standard deviation of residuals, with lower values indicating better measurement accuracy. The results suggest an

improvement in accrual quality post-2000, partly explained by reduced volatility in operating cash flows, and challenge widespread concerns about deteriorating earnings quality.

Accrual mispricing has also been studied in international contexts. Clinch et al. (2012), analyzing Australian data from 1991 to 2008, confirm that investors do not fully account for the accrual component of earnings, leading to pricing inefficiencies. Similarly, Gonçalves et al. (2020) examine the European sovereign debt crisis but find no persistent evidence of the accrual anomaly, suggesting that such anomalies may be context-dependent and not always exploitable for excess returns.

3 Methodological Aspects

The population of this study comprises all publicly traded companies in Brazil. Data on the independent variables—including accruals, entrenchment, monitoring, performance, firm size, and leverage—were obtained from the Refinitiv Eikon database, expressed in U.S. dollars. Executive compensation data were extracted from item 13 (Management Compensation) of each company's reference form, available through the Brazilian Securities and Exchange Commission (CVM) central system.

To ensure comparability of observations, non-industrial firms were excluded due to their distinct accounting standards and financial structures. Furthermore, firms with Tobin's Q values below zero or above ten were removed from the sample to mitigate the influence of outliers, following the approach of Cao et al. (2019). The analysis covers the period from 2010 to 2022, corresponding to the timeframe for which consistent executive and governance data were available. The final sample consists of 322 companies, yielding a total of 2,222 unbalanced panel observations.

To measure executive remuneration, we use five dependent variables: Total Executive Compensation (TOTAL), Average Executive Compensation (AVE), Base Salary (SAL), Bonus (BONUS), and Shares and Options Owned by Executives (SHARES). The independent variables include Total Accruals (TACC) and Discretionary Accruals (DACC), along with a set of control variables. Total Accruals are calculated following Dechow et al. (1995), Healy (1985), and Jones (1991), as shown in Equation (1):

$$TACC_{i,t} = \frac{\Delta CA_{i,t} - \Delta CL_{i,t} - \Delta Cash_{i,t} + \Delta STD_{i,t} - Dep_{i,t}}{AT_{i,t-1}} \quad (1)$$

Where $TACC_{i,t}$ is the total accruals. $\Delta CA_{i,t}$ is the change in current assets. $\Delta CL_{i,t}$ is the change in current liabilities. $\Delta Cash_{i,t}$ is the change in cash and cash equivalents. $\Delta STD_{i,t}$ is the change in short-term debt included in current liabilities. Dep_t is the depreciation and amortization expense. $AT_{i,t-1}$ is the total assets of the previous year. *Subscripts i and t denote firms and time periods, respectively.*

To measure discretionary accruals, we follow McNichols (2002), Dichow and Dichev (2002) and Jones (1991) and first calculate Total Accruals (TACC) according to Equation (1) and then use it as a dependent variable in Equation (2). Discretionary accruals (DACC) are derived as the residual term from Equation (2).

$$TACC_{i,t} = \alpha_0 + \alpha_1 CFO_{i,t} + \alpha_2 \Delta REV_{i,t} + \alpha_3 \Delta PPE_{i,t} + \mu_{i,t} \quad (2)$$

Where $TACC_{i,t}$ is the total accruals. $CFO_{i,t}$ is the cash flow from operations. $\Delta REV_{i,t}$ is the change in revenues. ΔPPE_t is the change in gross property, plant and equipment. $\mu_{i,t}$ is the

error term, which serves as a proxy for discretionary accruals. α_0 is the intercept, and α_1, α_2 and α_3 are the coefficients to be estimated. All the independent variables are deflated by assets of the company *i* in year *t-1*. *Subscripts i and t denote firms and time periods, respectively.*

The impact of discretionary accruals on executive compensation is estimated by Equation (3).

$$REM_{it} = \alpha_0 + \alpha_1 Accruals_{it} + \boldsymbol{W}_{it}\boldsymbol{\delta} + IndFE_i + TimeFE_t + \varepsilon_{it} \quad (3)$$

Where REM_{it} denotes each of the executive compensation variables (TOTAL, AVE, SAL, BONUS and SHARES). $Accruals_{it}$ represents the accrual-related variables (TACC and DACC). $\boldsymbol{W}_{it}$ is a vector of control variables. $IndFE_i$ and $TimeFE_t$ denote industry and time-fixed effects, respectively. α_0 is the intercept and α_1 and $\boldsymbol{\delta}$ are the coefficients to be estimated. ε_{it} is the error term. *Subscripts i and t denote firms and time periods, respectively.*

In addition, we control firm size, leverage, performance, and executive monitoring mechanisms. Table 1 presents the control variables, their definitions, the primary supporting studies, and the expected signs based on theoretical predictions.

Table 1. Control variables

Variables	Description	Authors	Signal
DUAL	$1 - CEO\ and\ Chairman\ are\ the\ same\ person;\ 0 - Otherwise$	Conyon et al. (2019); Ding, Ullah and Jebran (2022).	-
BSIZE	$number\ of\ diretors$	Conyon et al. (2019); Ding, Ullah and Jebran (2022).	-
IND	$percentage\ of\ independent\ directors$	Conyon et al. (2019); Ding, Ullah and Jebran (2022).	-
ROE	$\frac{Net\ profit}{Equity}$	Chen et al., (2020); Gipper (2021).	+/-
MB	$\frac{Market\ Value}{Total\ assets}$	Conyon et al. (2019); Ding, Ullah and Jebran (2022).	+/-
EQ	$Log\ (Total\ Equity)$	Chen, Torsin and Zhang (2022); Ding, Ullah and Jebran (2022).	+
LEV	$\frac{Current\ Liabilities\ +\ Non-Current\ Liabilities)}{Equity}$	Conyon *et al.*, (2019); Ding, Ullah and Jebran (2022).	+

Note: DUAL. Duality; BSIZE. Number of directors. IND. percentage of independent directors. ROE. return on equity. MB – Market-to_Book; EQ. Total equity. LEV. Leverage.
Source: Elaborated by the authors (2025).

To enhance the robustness of the statistical analyses, a series of data treatment steps were applied. First, winsorization was performed to mitigate the influence of outliers. Observations with negative equity, Tobin's Q values below 1 or above 10, and negative leverage were excluded. Following these adjustments, we computed descriptive statistics and estimated linear regressions using the Ordinary Least Squares (OLS) method with heteroskedasticity-robust standard errors. All analyses were conducted using STATA 14® statistical software.

The reliability of the results of OLS models is based on requirements are met. Therefore, to test the normality of the data, we perform the Doornik-Hansen test, which assumes as a null

hypothesis that the data have a normal distribution. We test for multicollinearity using the Variance Inflation Factor (VIF); the lower the VIF, the lower the correlation between the variables in the model. Regression estimates using the Ordinary Least Squares method also assume homoscedasticity of the data, that is, that the variance of the residuals is constant. Therefore, we perform the Breusch-Pagan test, which assumes as a null hypothesis that the data are homoscedastic.

4 Analysis of results

To better explain the results achieved, we divided this section into two parts: (a) descriptive statistics and correlation; (b) results of regression models and validation tests.

4.1. Descriptive statistics and correlation

We verified the correlation between the variables and, according to Hair et al. (2005), there is a high correlation if the index is above 0.70. In this sense, only the total, average and base salary remuneration variables showed a high correlation. After that, the VIF indicates that no variable is above 5, showing that there is no multicollinearity.

We estimated the descriptive statistics of the variables used in the present study, to certify the consistency and adequate treatment of the data. Table 2 shows the descriptive statistics of dependent, independent and control variables.

Table 2. Descriptive analysis of variables.

	Independent Variables			*Dependent Variables*			
	TACC	***DACC***	***TOTAL*** [(1)]	***AVE*** [(1)]	***SAL*** [(1)]	***BONUS***	***SHARES***
Mean	-0.0154	-0.0214	0.3952	0.0837	0.1946	0.0403	0.0649
Median	-0.0092	-0.0152	0.2100	0.0520	0.1200	0.0000	0.0000
P10	-0.0874	-0.0614	0.0395	0.0100	0.0200	0.0000	0.0000
P25	-0.0410	-0.4005	0.0900	0.0236	0.0500	0.0000	0.0000
P75	0.0164	-0.0009	0.4600	0.1000	0.2400	0.0300	0.0300
P90	0.0539	0.0098	0.9400	0.1833	0.4400	0.1100	0.1600
Variance	0.0182	0.0007	0.3548	0.0134	0.0634	0.0118	0.0565
Minimum	-3.6891	-0.1180	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.5628	0.0345	10.4500	2.4307	2.8500	1.3100	3.8000
SD	0.1351	0.0279	0.5956	0.1158	0.2519	0.1086	0.2377
Assym.	-17.9283	-0.7169	5.5119	6.9187	3.6814	5.6681	8.6815
Kurtosis	488.5071	3.1891	58.3315	101.1096	23.2595	46.2619	105.0619
	Control Variables						
	EQ [(1)]	***LEV***	***MB***	***ROE***		***BSIZE***	***IND***
Mean	2.0478	1.3154	0.7741	0.1104		7.9711	0.2495
Median	0.4376	0.7494	0.5289	0.1129		7.0000	0.2200
P10	0.0441	0.0514	0.1061	-0.0554		4.0000	0.0000
P25	0.1569	0.2999	0.2484	0.0368		5.0000	0.0000
P75	1.1762	1.4151	0.9678	0.1935		10.0000	0.4000
P90	3.0411	2.4226	1.7571	0.3018		13.0000	0.5700
Variance	$9.27x10^5$	8.8466	0.6573	0.9521		14.8333	0.0525
Minimum	0.7000	0.0000	0.0002	-12.2190		0.0000	0.0000
Maximum	184.8763	96.1751	6.0876	35.7299		28.0000	0.1000
SD	9.6256	2.9743	0.8107	0.9757		3.8514	0.2293
Assym.	12.3822	16.7766	2.3427	22.6436		0.9744	0.7943
Kurtosis	188.6508	478.3173	10.1566	864.8666		4.2329	3.1451

Note: [(1)] In millions of dollars (U$$). TACC. Total accruals. DACC. Discretionary accruals. TOTAL. Total executive compensation; AVE. average executive compensation; SAL. Salary base. BONUS. Bonus. SHARES. Shares and options owned by executives. EQ. Equity. LEV. Leverage. MB. Market-to-Book. ROE. Return on Equity. BSIZE. Board Size. IND. Independent Board Members. SD. Standard deviation.
Source: Elaborated by the authors. (2025).

The mean value of total accruals (TACC) is negative, indicating that, on average, firms reported accounting profits lower than their operating cash flows over the period analyzed. The wide range between minimum and maximum values reveals substantial data variability—further evidenced by a standard deviation far exceeding the mean. The negative skewness (–17.93) reflects a concentration of observations on the left side of the distribution and points to the presence of extreme negative values. This finding is reinforced by the exceptionally high kurtosis (488.51), which clearly indicates a non-normal distribution. These features justify the implementation of winsorization and the use of regression models with robust standard errors.

Discretionary accruals (DACC) display similar distributional characteristics—namely, negative skewness and kurtosis greater than three—although these are considerably less pronounced. This is likely due to the winsorization process, and the statistical modeling approach employed, given that this variable corresponds to the residuals obtained from Equation (2). As a result, its distribution more closely approximates normality.

As for the dependent variables, their values are inherently non-negative, since executive compensation cannot fall below zero. This explains the positive means and the right-skewed distributions. The presence of high dispersion is evident, with standard deviations exceeding the means across all forms of compensation, particularly in the cases of BONUS and SHARES. Kurtosis levels are also high, indicating the occurrence of extreme values within the distribution.

Turning to the control variables, the dispersion in Equity is especially notable, which is expected given that the sample includes firms of various sizes. Leverage also exhibits high kurtosis, suggesting the presence of outlier firms with particularly elevated levels of equity or debt. On average, leverage was 1.31, indicating that companies held more debt than equity. The mean return on equity (ROE) was 0.1104, or 11.04%, which may be interpreted as a sign of satisfactory financial performance. However, the average market-to-book ratio was only 0.77, suggesting that firms were generally undervalued by the market relative to their book value during the period under review.

4.2. Results of regression models and validation tests

To identify the effect of accruals on executive compensation, we estimated econometric models using the robust OLS method. Table 3 presents the regression results Total Accruals (TACC) as the key explanatory variable. while Panel B uses Discretionary Accruals (DACC).

Table 3. Regression model results - Total Accruals (TACC).

	Total Accruals – TACC				
	TOTAL	***AVE***	***SAL***	***BONUS***	***SHARES***
TACC	***-0.0092****	-0.0319	-0.0070	-0.0076	-0.0179
EQ	-0.0016	-0.0024	-0.0021	-0.0017	-0.0015
LEV	-0.0027	-0.0029	**-0.0039****	**-0.0039****	**-0.0037****
ROE	***0.0492*****	***0.0499*****	**0.0478*****	**0.04810*****	**0.0476*****
MB	0.0001	-0.0004	-0.0021	-0.0020	-0.0015
DUAL	0.0077	0.0072	0.0078	0.0079	0.0082
BSIZE	0.0004	0.0004	0.0006	0.0006	0.0007
IND	-0.0048	-0.0058	-0.0053	-0.0048	-0.0032
Constant	0.0080	0.0112	0.0121	0.0045	0.0047
Statistic F	***4.00*****	***3.84*****	**3.80*****	**3.79*****	**4.03*****
R^2	0.1409	0.1399	0.1333	0.13,29	13.43

Note:TACC. Total accruals. TOTAL. Total executive compensation; AVE. average executive compensation; SAL. Salary base. BONUS. Bonus. SHARES. Shares and options owned by executives. EQ. Equity. LEV. Leverage. MB. Market-to-Book. ROE. Return on Equity. DUAL. Dual role of CEO-Chairman. BSIZE. Board Size. IND. Independent Board Members. Source:
Elaborated by the authors. (2025).

Table 3 reports the estimated coefficients for five separate regressions, each with a different dependent variable: TOTAL, AVE, SAL, BONUS, and SHARES. These compensation variables are regressed on total accruals along with a set of control variables. A statistically significant and negative coefficient for total accruals is observed in the regression explaining total executive compensation. This finding contrasts with theoretical expectations, suggesting that executive compensation increases as total accruals decrease. Additionally, leverage is negatively associated with executive pay, whereas ROE exhibits a strong positive effect. In other words, executives tend to receive higher compensation in firms with lower debt levels and stronger financial performance, as measured by return on equity—an outcome consistent with economic rationale.

In addition, Table 4 presents the regression results Discretionary Accruals (DACC) as the key explanatory variable.

Table 4. Regression model results - Discretionary Accruals (DACC).

	Discretionary Accruals – DACC				
	TOTAL	***AVE***	***SAL***	***BONUS***	***SHARES***
DACC	0.0001	0.0001	-0.0001	**-0.0008***	0.0002
EQ	**0.0003*****	**0.0003*****	**0.0003*****	**0.0003*****	**0.0003*****
LEV	0.0001	**0.0001***	0.0001	0.0001	0.0001
ROE	0.0003	0.0003	0.0004	0.0004	**0.0004***
MB	0.0001	0.0001	0.0001	0.0001	0.0001
DUAL	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002
BSIZE	0.0005	0.0008	-0.0028	0.0005	0.0003
IND	-0.0008	-0.0008	-0.0007	**-0.0007****	**-0.0006***
Constant	**-0.0207*****	**-0.0212*****	**-0.0200*****	**-0.0202*****	**-0.0201*****
Statistic F	**10.73*****	**10.49*****	10.57***	10.62***	10.36***
R^2	0.2086	0.2097	0.2076	0.2097	0.2027

Note: DACC. Discretionary accruals. TOTAL. Total executive compensation; AVE. average executive compensation; SAL. Salary base. BONUS. Bonus. SHARES. Shares and options owned by executives. EQ. Equity. LEV. Leverage. MB. Market-to-Book. ROE. Return on Equity. DUAL. Dual role of CEO-Chairman. BSIZE. Board Size. IND. Independent Board Members. Source:
Elaborated by the authors. (2025).

Table 4 replicates the analysis using discretionary accruals as the main explanatory variable. The results reveal that the Equity variable is positively and significantly associated with all types of executive compensation, indicating that firms with higher levels of equity tend to offer greater compensation packages across all components. Bonus-based compensation shows statistically significant negative coefficients for both discretionary accruals and the presence of independent board members. These findings suggest that bonuses are lower in firms with higher discretionary accruals and a more independent board structure. Conversely, lower discretionary accruals and fewer independent directors are linked to higher bonus payouts—potentially reflecting greater managerial discretion or opportunistic behavior in setting compensation.

As for share- and option-based compensation, positive and significant coefficients are found for both Equity and ROE, while the coefficient for Independent Board Members remains negative and statistically significant. These patterns reinforce the idea that performance and capital structure are important drivers of compensation, and that board independence may play a role in limiting certain types of remuneration.

An additional way to explore the results is to divide the control variables by total assets, in order to put this measure into perspective. Based on this criterion, the estimates presented in Table 5 were made.

Table 5. Regression models moderated by Total Assets.

Total Accruals moderated by Total Assets (TACAT)					
	TOTAL	***AVE***	***SAL***	***BONUS***	***SHARES***
TACAT	**-0.0003*** **	**-0.0001** **	-0.0001	**0.0004** **	**0.0004*** **
EQ	**0.0001*** **	**0.0001*** **	**0.0001*** **	**0.0004*** **	**0.0004*** **
LEV	**0.0001*** **	**0.0001*** **	**0.0002*** **	**0.0002*** **	**0.0002**** **
ROE	-0.0002	-0.0002	0.0001	0.0001	0.0001
MB	0.0037	0.0001	**0.0006***	**0.0006***	0.0005
DUAL	-0.0002	-0.0001	**-0.0002** **	**-0.0002** **	**-0.0002** **
BSIZE	**-0.0001*** **	**-0.0001*** **	**-0.0004*** **	**-0.0004*** **	**-0.0004*** **
IND	-0.0003	**-0.0003***	**-0.0005*** **	**-0.0005*** **	**-0.0005*** **
Constant	**-0.0003*** **	**-0.0003*** **	**-0.0002*** **	**-0.0002*** **	**-0.0002*** **
Statistic F	**9.02*** **	**8.98*** **	**10.06*** **	**10.38*** **	**10.06*** **
R^2	0.2421	0.2389	0.3756	0.3765	0.3774

Note: (1) In millions of dollars (U$$). TACC. Total accruals. DACC. Discretionary accruals. TOTAL. Total executive compensation; AVE. average executive compensation; SAL. Salary base. BONUS. Bonus. SHARES. Shares and options owned by executives. EQ. Equity. LEV. Leverage. MB. Market-to-Book. ROE. Return on Equity. DUAL. Dual role of CEO-Chairman. BSIZE. Board Size. IND. Independent Board Members. Source: Elaborated by the authors. (2025).

The results presented in Table 5 show a considerably higher number of significant coefficients. The regressions estimated with total and average compensation display negative coefficients for the total accruals variable, whereas the regressions estimated with bonuses and shares present positive coefficients. This indicates that as accruals increase, total and average compensation decrease—possibly because accruals increase the value of assets, thus reducing their proportion when earnings are high. However, in the case of bonuses and shares, the coefficients are positive; that is, as accruals increase, these forms of compensation also increase, likely because they are variable components granted in response to strong performance.

As for the control variables, equity and leverage exhibit positive coefficients in all cases, indicating a positive effect on executive compensation. The market-to-book ratio shows negative coefficients in two cases, suggesting that the higher the proportion between market value and book value, the lower the executive compensation.

The variables dual, board size, and independent board members present negative coefficients in all cases where they are statistically significant, demonstrating that higher values in these variables are associated with lower executive compensation. Therefore, when the chairman and CEO are the same person, executive compensation is lower. Additionally, larger boards and a higher proportion of independent board members may act as governance mechanisms that constrain managerial discretion.

6 Conclusion

This study investigated the relationship between accruals and executive compensation in publicly traded companies in Brazil from 2010 to 2022, using both total and discretionary accruals as explanatory variables. Grounded in agency theory (Jensen & Meckling, 1976) and corporate governance literature (Berle & Means, 1932; Shleifer & Vishny, 1997), the research aimed to explore how accounting practices—specifically accruals—affect incentive structures within firms, and how governance mechanisms moderate this relationship.

The descriptive statistics revealed a predominance of negative total accruals, suggesting that, on average, firms report accounting profits lower than their operating cash flows. This is consistent with the view that accrual-based earnings may incorporate elements of managerial discretion, and in extreme cases, earnings management (Dechow, Sloan, & Sweeney, 1995; Dechow & Dichev, 2002). High kurtosis and strong skewness reinforced the need for data winsorization and the use of robust estimation methods.

The regression analyses offered several important insights. First, total accruals were negatively associated with total and average executive compensation. This result diverges from classical assumptions that performance-based compensation encourages earnings maximization through accruals (Healy, 1985; Sloan, 1996). Instead, the negative coefficient suggests that higher accruals may not be perceived as credible signals of firm performance—or may even trigger governance restrictions on compensation adjustments.

However, when decomposing compensation into components, we found that bonuses and share-based payments increased with total accruals. This pattern aligns with the notion that these types of compensation are more performance-sensitive and potentially more vulnerable to opportunistic behavior, especially in firms where monitoring mechanisms are weaker (Bushman et al., 2016; Cavaco et al., 2020).

Regarding discretionary accruals, the results were more nuanced. While they were not consistently significant across all compensation models, a negative association was observed in the case of bonus payments. This finding may indicate that higher managerial discretion—proxied by discretionary accruals—is not necessarily rewarded through bonuses, particularly in firms with stronger governance environments.

Governance variables provided important insights. The duality indicator (DUAL), representing the CEO also serving as chairman, consistently exhibited negative and significant coefficients across various models. This suggests that firms with dual leadership structures may apply more conservative pay policies, possibly as a form of self-regulation or in anticipation of external scrutiny. Similarly, larger board size and a higher proportion of independent members were associated with lower compensation, reinforcing their roles as monitoring mechanisms.

Equity and leverage were positively associated with executive pay, indicating that firms with greater financial capacity and capital structure complexity tend to offer more substantial compensation packages.

These findings contribute to the literature on earnings quality and executive incentives by highlighting that not all components of compensation respond uniformly to accounting accruals. While agency theory suggests aligning manager and shareholder interests through performance-linked pay, the results here suggest that such alignment is contingent on governance quality, capital structure, and the type of compensation involved.

Moreover, this study supports the notion that accruals—particularly discretionary accruals—serve as a potential mechanism for earnings management, with observable impacts on how managers are compensated. As such, the quality of accruals becomes not only an issue of financial reporting but also of incentive alignment.

From a practical standpoint, the findings emphasize the importance of designing compensation systems that distinguish between accounting performance and cash-based performance. They also underscore the role of governance mechanisms in curbing opportunistic behavior.

Nonetheless, this study has limitations. It focuses exclusively on Brazilian publicly traded companies, which operate in an emerging market with specific regulatory and governance structures. Additionally, while the models controlfor several firm-level characteristics, unobserved heterogeneity or omitted variables may still influence the outcomes.

Future research could expand the analysis to other institutional contexts, include qualitative dimensions of compensation contracts, or test alternative governance indicators. Ultimately, this study reaffirms that executive compensation is not only a function of performance but also of accounting discretion, governance quality, and financial structure.

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