EARNINGS MANAGEMENT UNDER CORPORATE AND REGULATORY STANDARDS IN BRAZILIAN ELECTRIC POWER DISTRIBUTORS

GERENCIAMENTO DE RESULTADOS SOB PADRÕES SOCIETÁRIO E REGULATÓRIO EM DISTRIBUIDORAS DE ENERGIA ELÉTRICA BRASILEIRAS

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ABSTRACT

This study aims to verify the existence of significant differences in earnings management levels between corporate and regulatory reports of Brazilian electric utility companies. We collected data from 52 electric utility distributors between 2011 and 2021, analyzing a total of 542 observations. Earnings management was calculated using the Modified Jones model by Dechow, Sloan, and Sweeney (1995) and the model proposed by Kothari, Leone, and Wasley (2005). We employed the Wilcoxon signed-rank test, a non-parametric method, to analyze significant differences between the corporate and regulatory standards due to the lack of normality in the earnings management aimed at increasing results, whereas corporate reports show earnings management aimed at reducing outcomes. Inferential results indicate that both models of earnings management demonstrate significant differences between the standards, highlighting that there are distinct incentives in providing information to users of regulatory and corporate reports. The results are important because they show that the quality of accounting information changes depending on the type of standard used to write the report. They also show that there are big differences in the information and clear reasons for results that go up or down depending on the accounting standard.

Keywords: Earnings Management; Regulatory Standard; Corporate Standard; Electric Power; Information Quality.

RESUMO

Este artigo tem como objetivo verificar a existência de diferenças significativas nos níveis de gerenciamento de resultados entre os relatórios societários e regulatórios de empresas brasileiras de energia elétrica. Foram utilizadas informações referentes à 52 distribuidoras de energia elétrica, dentre o período de 2011 a 2021, compreendendo um total de 542 observações analisadas. O gerenciamento de resultados foi calculado pelos modelos de Jones Modificado por Dechow, Sloan e Sweeney (1995) e Kothari, Leone e Wasley (2005). Devido a ausência de normalidade das variáveis referentes ao gerenciamento, utilizou-se o teste não paramétrico da soma dos postos de Wilcoxon para a análise de diferenças significativas entre os padrões societário e regulatório. Os resultados descritivos evidenciam que em média, nos demonstrativos regulatórios há um gerenciamento para aumento dos resultados, enquanto nos demonstrativos societários o gerenciamento é para a redução de resultados. Os resultados inferenciais denotam que para ambos os modelos de gerenciamento há diferenças significativas entre os padrões, demonstrando que há incentivos distintos no fornecimento de informações para os usuários das demonstrações regulatórias e societárias. Os achados são relevantes por evidenciarem que a qualidade da informação contábil muda conforme o tipo de padrão que orienta a elaboração dos relatórios, onde nota-se a existência de diferenças significativas entre as informações com incentivos distintos para aumento ou redução de resultados, entre distintos padrões contábeis.

Palavras-chave: Gerenciamento de Resultados; Padrão Regulatório; Padrão Societário; Energia Elétrica; Qualidade da Informação.

1 INTRODUCTION

Public services, including energy, transportation, and telecommunications, are regulated in ways that influence their market competition (BALMER; LEVIN; SCHMIDT, 2020). Santos et al. (2012) assert that the purpose of regulation is to guarantee the provision of services to consumers and to prevent the imposition of excessive prices for essential services. The aim of regulation is not to control companies but to protect society in the execution of activities considered essential for its well-being (SERRANO III, 2013). Thus, Brazil established several regulatory agencies to oversee companies in their respective sectors (SILVA et al., 2014).

The electricity sector is considered fundamental in the Brazilian context. According to Ferreira et al. (2021), this sector is responsible for supplying electricity, a primary source for the functioning of practically all societal activities. The Brazilian electricity sector generates a significant portion of its energy from renewable sources, offering a significant global advantage, particularly in achieving decarbonization goals and expanding renewable sources beyond hydroelectric plants (BOTELHO et al., 2022). As a result, the Brazilian electricity sector has attracted foreign investors, particularly from China (LI; GALLAGHER; MAUZERALL, 2020).

Economic theory of regulation suggests that state-owned enterprises demonstrate lower operational efficiency due to governments' lack of focus on profit and operational efficiency. Therefore, to increase productivity and improve service quality, the Brazilian electricity distribution segment underwent privatization policies (MULLER; REGO, 2021).

The crucial role of the electricity sector and its integration into the global economy led to the adoption of International Financial Reporting Standards (IFRS), which brought various benefits to electricity companies (BAKIDJANOVICH; KARIMJONOVICH; BOKHODIROVICH, 2022). Implementing IFRS has contributed to better international cooperation and communication between companies from different countries, simplifying investment analysis and decision-making (IBRAHIMOV et al., 2022).

The Brazilian electricity sector has a particularity due to the National Electric Energy Agency (ANEEL) regulating the sector and issuing specific accounting standards that companies must adopt.

Due to the convergence of standards, the Brazilian electricity sector prepares accounting information under two distinct frameworks: corporate accounting, established by CPC/IASB, and regulatory accounting, established by ANEEL (FERREIRA et al., 2021).

The study by Alexandre and Mello (2017) addresses that users of accounting information from companies in regulated sectors need assurance about the quality of the information in their reports. Additionally, Morais et al. (2019) note that the regulatory environment, through increased monitoring by the regulatory agency or increased discretion in the regulation process, can influence the quality of accounting information.

The quality of accounting information refers to the usefulness of the numbers reported in financial statements for decision-makers (SCHIPPER; VINCENT, 2003). The more useful the information is to users, the higher its reported quality. According to Healy and Wahlen (1999), accounting information can lose quality due to earnings management, which involves discretionary manipulation of accounting information by management for personal gain. Therefore, earnings management negatively affects the quality of financial reports, as it impacts the usefulness of the information for its various users.

Few studies have examined the unique impact of different accounting standards on the quality of accounting information in the electricity sector. Studies like Flores and Lopes (2019) provide evidence that the application of international accounting standards in the Brazilian environment negatively affected the relevance of accounting information in electricity distributors. In contrast, studies by Ferreira et al. (2021) and Souza, Ribeiro, and Paulo (2024) provide evidence that accounting information prepared under the corporate framework is more relevant compared to the regulatory framework in Brazilian electricity companies. Therefore, there is a lack of consensus among studies, with Flores and Lopes (2019) suggesting that corporate information generates less relevance, and Ferreira et al. (2021) and Souza, Ribeiro, and Paulo (2024) indicating that regulatory information generates less relevance.

Earnings management models, which measure the quality of accounting information, can manipulate accruals through the choice of accounting practices permitted by legislation (MARTINEZ; CARDOSO, 2009). However, they may not best represent a company's economic reality. Additionally, the importance of using earnings management as a quality proxy stems from its analysis of more specific accounting accounts, unlike other models that solely rely on profit as a measure.

This study aims to address a gap in the analysis of earnings management attributes in an economic sector that presents financial information under two distinct regulatory frameworks. This aids in revealing the information's quality and the perspectives that each type of accounting standard adopts.

Considering the disclosure of information under two different standards in the Brazilian electricity sector and its significance to various users, we outlined the following research question: What differences exist in the levels of earnings management between corporate and regulatory standard reports for Brazilian electricity companies?

Therefore, this research is designed to evaluate the differences in earnings management levels between corporate and regulatory standard reports of Brazilian electricity companies, based on the presented problem. Finding out if there are differences in management levels between standards is meant to see if businesses show different views of their operations depending on the standard they use and the type of user group, such as regulatory (government, regulatory agency, etc.) or corporate (investors, creditors, etc.) (FERREIRA et al., 2021).

This study aims to contribute to various stakeholders interested in information from electricity companies. Initially, regulators can observe if companies adopt practices that generate different information under the standards required by organizations, signaling the possibility of divergent treatments in generated reports. Consumers can observe if the generated information is reliable regarding service revenue. Investors and creditors can see if the financial situation between standards converges, attributing greater reliability to their judgment and decision-making regarding resource allocation.

2 THEORETICAL FRAMEWORK

2.1 Regulation of the Brazilian Electricity Sector

Brazil exercises regulation through its regulatory agencies, whose primary function is to oversee and control companies to mitigate potential political and ideological influences on their activities (ANTONELLI et al., 2018). Holanda and Coelho (2020) assert that regulatory agencies serve as a mechanism to mitigate or prevent political interference in organizational activities, thereby enhancing societal well-being.

Regulation organizes public utility services like electricity, telecommunications, transportation, postal services, and fuels (SERRANO III, 2013). One of the significant challenges faced by regulators is that private companies have the opportunity to monopolize services, thereby achieving high profits in their operations (SANTOS et al., 2012). Therefore, agencies must guide their regulation with fundamental aspects such as ensuring service provision, establishing precise levels in the quality/price ratio, and prioritizing societal well-being (SERRANO III, 2013).

As presented by Ferreira et al. (2021), energy is an essential factor that stimulates the Human Development Index (HDI), a parameter widely used as a measure of a population's well-being. Therefore, Brazil created the National Electric Energy Agency (ANEEL) to regulate and oversee the sector, with the primary responsibility of seeking a balance between government, society, and investors (ANDRADE; MARTINS, 2017). To regulate companies in the Brazilian electricity sector, ANEEL established the Public Electricity Service Accounting Manual (MCSPEE) through Normative Resolution No. 444/2001, which structured a single accounting standard for all agents in this sector (SOUZA; RIBEIRO; PAULO, 2024).

From 2010 onwards, Brazil adopted the international accounting standards issued by the International Accounting Standards Board (IASB), which had a significant impact on the accounting for public service concessions, particularly in the Brazilian electricity sector (BAKIDJANOVICH; KARIMJONOVICH; BOKHODIROVICH, 2022; RIBEIRO; SILVA, 2017). This convergence stopped some regulatory items from being included in the financial statements of electricity companies. This made it easier to use both general accounting and specific accounting (FERREIRA et al., 2021).

ANEEL's Normative Resolution No. 396/2010 initially mandated that companies in the electricity sector must present financial statements based on corporate and regulatory standards (FERREIRA et al., 2021). The decision to establish parallel accounting to corporate accounting was due to the inability to register certain previously recorded assets and liabilities and altered rules for recognizing certain revenues (BRUGNI et al., 2012).

Therefore, companies in the Brazilian electricity sector are required to present their financial statements under two distinct standards: corporate, based on international standards issued by the IASB, and regulatory, based on specific fiscal and tariff rules, which may lead to discrepancies in reconciling some accounting groups (FERREIRA et al., 2021).

Over the years, the Accounting Pronouncements Committee (CPC) has issued technical guidelines that have resulted in greater alignment between corporate and regulatory accounting, recognizing corporate accounting's regulatory assets and liabilities previously only recognized in regulatory accounting (RIBEIRO; SILVA, 2017). However, there are still particularities in both standards that make the two accountings distinct.

Due to its particularities, the regulatory environment can either positively influence the quality of financial statements through increased monitoring and reduced transaction costs, or negatively through increased discretion, making the environment conducive to accounting information manipulation (MORAIS et al., 2019). Therefore, it is crucial to analyze the quality of accounting information from this sector, given its unique characteristics.

2.2 Quality of Accounting Information and Earnings Management

Information reported in an organization's financial statements must be relevant and faithfully represent its financial performance, influencing the judgments and decisions of various users of financial statements (DECHOW; GE; SCHRAND, 2010). Perotti and Wagenhofer (2014) assert that the quality of accounting information is crucial in ensuring the reliability of financial statements, as it incorporates the principle of usefulness for investors and other capital providers in their judgments and decisions.

Low quality accounting information has various implications for users, and it is strongly associated with information manipulation by managers (PAULO; MOTA, 2019; SALGADO; SOUZA, 2021). Healy and Wahlen (1999) assert that managers engage in information manipulation as a form of earnings management, aiming to secure personal gains at the cost of the group.

Adjustments in a company's results over a period can generate accruals for earnings management. This is because measuring accounting elements solely by the cash basis cannot capture the effects of all transactions occurring in the organization (DECHOW; DICHEV, 2002). Martinez and Cardoso (2009) state that earnings management stems from accounting choices allowed by legislation but can produce accounting numbers that diverge from reality.

Paulo and Mota (2019) assert that accruals can either be discretionary, stemming from unjustified manipulation of accounting results, or non-discretionary, reflecting the company's actual activities. Discretionary accruals, resulting from intentional manipulation of accounting information, represent management discretion beyond the typical practices of the company's institutional environment (PAULO; MOTA, 2019). When you look at the institutional environment (KANG; SIVARAMAKRISHNAN, 1995), these manipulations have much smaller effects on the company's finances than non-discretionary accruals, which come from normal business activities. Therefore, earnings management negatively affects information quality due to intentional manipulation by managers (SALGADO; SOUZA, 2021).

According to Alexandre and Mello (2017), the regulatory environment can result in incentives for managers to adopt practices that meet specific regulatory demands. Morais et al. (2019) suggest that managers of regulated companies may be motivated to manipulate accounting information in order to satisfy regulatory requirements.

Finally, the study by Niesten and Jolink (2012) observed opportunistic behavior by their agents as a result of increased competition in the energy sector, where private companies increasingly aim for profit. Muller and Rego (2021) assert that the privatization policy in the Brazilian environment necessitated the implementation of an incentive policy. Therefore, due to incentive policies requiring companies to achieve specific indicators, managers may adopt practices aimed at achieving certain incentives (ALEXANDRE; MELLO, 2017). Additionally, these policies often prioritize profit maximization, which can negatively impact the services these organizations provide (GIANNAKIS; JAMASB; POLLITT, 2005).

As previously mentioned, meeting specific informational demands may affect the quality of accounting information in companies in the electricity sector. The sector's dual disclosure of information presents the following research hypothesis:

H₁: There is a difference in the level of earnings management between corporate and regulatory reports of companies in the electricity sector.

3 METHODOLOGY

3.1 Sample and Data Collection

This research aims to examine the behavior of information quality in the financial statements of Brazilian electricity distribution companies by comparing the level of earnings management as determined by corporate standards and regulatory standards. Initially, we collected information from the National Electric Energy Agency (ANEEL) platform regarding the number of companies in this segment.

Table 1 presents information on the companies by region and the criteria for excluding companies from the sample.

| Region of the Electricity Distribution Company | Quantity |
|--|----------|
| North | 8 |
| Northeast | 9 |
| Central-West | 5 |
| Southeast | 22 |
| South | 17 |
| (-) Companies lacking complete information in their statements | -9 |
| Total | 52 |

Table 1 - Sample of Companies by Region

Source: Prepared by the authors (2023).

According to the data in Table 1, there is a higher concentration of companies in the Southeast and South regions and a smaller number of companies in the Central-West region. We excluded companies due to their lack of necessary information for estimating the earnings management variable or their failure to provide certain statements in accordance with the regulatory standard.

This research's final sample includes 52 companies, analyzed from 2011 to 2021. Since earnings management models use lagged variables (t-1), we excluded the year 2010 from the number of observations during the initial data collection period in 2010. Additionally, we set the initial period at 2010 as it marked the beginning of information disclosure under international accounting standards, paving the way for dual disclosure and enabling this study.

Not all companies have information for the entire analyzed period, so the research covered a total sample of 542 observations. The research sample encompasses both publicly traded and privately held companies, with data gathered from ANEEL's Economic and Financial Information Center based on the companies' CNPJ.

3.2 Earnings Management Model

Two models served as the basis for measuring earnings management: the Modified Jones Model by Dechow, Sloan, and Sweeney (1995) and the Modified Jones Model by Kothari, Leone, and Wasley (2005). Both models use discretionary accruals as a proxy for earnings management. Initially, Equation (1) described the calculation for estimating total accruals.

$$TA_{it} = \left(\left(\Delta CA_{it} - \Delta Cash_{it} \right) - \left(\Delta CL_{it} - \Delta Deb_{it} \right) - Depr_{it} \right) / At_{it-1}$$
(1)

Once we obtain the total accruals, we perform a regression to determine the discretionary accruals, which represent the random component of the model (ε_{it}). Equation (2) shows the estimated regression model for the Dechow, Sloan, and Sweeney (1995) model.

$$TA_{it} = \alpha \left(\frac{1}{At_{it-1}}\right) + \beta_1 (\Delta R_{it} - \Delta C_{it}) + \beta_2 (FA_{it}) + \varepsilon_{it}$$
(2)

For the Kothari, Leone, and Wasley (2005) model, the estimated regression model to obtain discretionary accruals includes an additional independent variable representing the return on assets of the companies. Equation (3) presents the model.

$$TA_{it} = \alpha \left(\frac{1}{At_{it-1}}\right) + \beta_1 (\Delta R_{it} - \Delta C_{it}) + \beta_2 (FA_{it}) + \beta_3 (ROA_{it}) + \varepsilon_{it}$$
(3)

Where: TA_{it} = Total accruals of company i in period t, weighted by total assets at the end of period t-1; ΔCA_{it} = Change in current assets of company i in period t;; ΔCL_{it} = Change in current liabilities of company *i* in period *t*; $\Delta Cash_{it}$ = Change in cash and cash equivalents of company *i* in period t; ΔDeb_{it} = Change in current liabilities debt of company i in period t; $Depr_{it}$ = Depreciation and amortization expense of company i in period t; At_{it-1} = Total assets of the company i at the end of period t-1; ΔR_{it} = Change in net revenues of company i from period t-1to period t, weighted by total assets at the end of period t-1; ΔC_{it} = Change in accounts receivable (customers) of company i from period t-1 to period t, weighted by total assets at the end of period t-1; FA_{it} = Fixed assets and deferred assets accounts of company i at the end of period t, weighted by total assets at the end of period t-1; FA_{it} = Fixed assets and deferred assets of company i in period t; ε_{it} = Random variable representing the residuals of the estimated regression models, assumed as proxies for the discretionary part of accruals.

3.3 Statistical Methods for Data Analysis

We analyzed the earnings management measures using the previously discussed models, but we collected the information from two distinct sources: regulatory financial statements and corporate financial statements. Therefore, we calculate discretionary accruals for each of the earnings management models using regulatory and corporate information. Table 2 summarizes the variables used in the research:

| Variables | les Measurement | |
|----------------------------------|--|--------------------------|
| Regulatory Earnings Management - | Discretionary accruals obtained by the Dechow, Sloan, and | ANEEL Information |
| Dechow (REMD) | Sweeney (1995) model based on regulatory information. | Center |
| Corporate Earnings Management - | Discretionary accruals obtained by the Dechow, Sloan, and | ANEEL Information |
| Dechow (CEMD) | Sweeney (1995) model based on corporate information. | Center |
| Regulatory Earnings Management - | Discretionary accruals obtained by the Kothari, Leone, and | ANEEL Information |
| Kothari (REMK) | Wasley (2005) model based on regulatory information. | Center |
| Corporate Earnings Management - | Discretionary accruals obtained by the Kothari, Leone, and | ANEEL Information |
| Kothari (CEMK) | Wasley (2005) model based on corporate information. | Center |

Table 2 - Variables Analyzed in the Study

Source: Prepared by the authors (2023).

We used the Wilcoxon signed-rank test to identify significant differences in the levels of earnings management, as per the research hypothesis. We justify this test as a paired sample test because we measure the same company's earnings management using two different procedures (FÁVERO; BELFIORE, 2017). This non-parametric test is also used because none of the variables that were sampled were normal. The Jarque-Bera Test showed that the null hypothesis was not true, with p-values less than 0.0001.

The Wilcoxon signed-rank test aims to verify the existence of distribution differences between two samples considering their relative position in the sample and not their observed value. We will compare each dimension of earnings management, whether measured by Dechow, Sloan, and Sweeney (1995) or by Kothari, Leone, and Wasley (2005), between regulatory and corporate standards to determine if the level of discretionary accruals differs between the distinct accounting standards. We will conduct tests to compare the variables REMD and CEMD, as well as REMK and CEMK.

4 RESULTS

4.1 Descriptive Statistics Analysis

The research data were initially analyzed based on descriptive statistics through measures of central tendency (mean, median, minimum, and maximum) and measures of dispersion (standard deviation and coefficient of variation). Table 3 provides the descriptive statistics results for the four variables analyzed in the research. The information presented indicates that the earnings management measures show similarities between the models of Dechow, Sloan, and Sweeney (1995) and Kothari,

Leone, and Wasley (2005). However, there are differences in these indices when comparing the adopted accounting standards.

| Mean | Median | Minimum | Maximum | Std. Deviation | Var. Coef. |
|---------|-----------------------------|---|---|--|---|
| 0.0131 | 0.0024 | -1.0868 | 3.3245 | 0.2044 | 15.604 |
| 0.0132 | 0.0024 | -1.0893 | 3.3231 | 0.2044 | 15.614 |
| -0.0158 | -0.0235 | -1.1085 | 1.8103 | 0.1731 | 10.902 |
| -0.0162 | -0.0248 | -1.0079 | 1.8697 | 0.1727 | 10.602 |
| | 0.0131 0.0132 -0.0158 | 0.0131 0.0024 0.0132 0.0024 -0.0158 -0.0235 | 0.0131 0.0024 -1.0868 0.0132 0.0024 -1.0893 -0.0158 -0.0235 -1.1085 | 0.0131 0.0024 -1.0868 3.3245 0.0132 0.0024 -1.0893 3.3231 -0.0158 -0.0235 -1.1085 1.8103 | 0.0131 0.0024 -1.0868 3.3245 0.2044 0.0132 0.0024 -1.0893 3.3231 0.2044 -0.0158 -0.0235 -1.1085 1.8103 0.1731 |

Table 3 - Descriptive Statistics of Study Variables

REMD = Regulatory Earnings Management by Dechow, Sloan, and Sweeney (1995); REMK = Regulatory Earnings Management by Kothari, Leone, and Wasley (2005); CEMD = Corporate Earnings Management by Dechow, Sloan, and Sweeney (1995); and CEMK = Corporate Earnings Management by Kothari, Leone, and Wasley (2005).

Source: Research results (2023).

The results for the regulatory standard show positive discretionary levels relative to the mean in both regression models, while for the regulatory standard, these levels are negative. We conducted the Wilcoxon test results for two groups, comparing earnings management levels using the Modified Jones Model by Dechow, Sloan, and Sweeney (1995) and the Modified Jones Model by Kothari, Leone, and Wasley (2005). We observe that both management models under the regulatory standard have higher maximum accruals, while the corporate standard has lower accruals. These results alone demonstrate the differences in information quality between the different standards, with regulatory practices primarily focusing on increasing results, while corporate practices aim for reducing them.

The analysis of central tendency measures reveals a greater dispersion of management measures under the regulatory standard compared to the corporate standard, suggesting a more distinct use of regulatory information for discretionary management practices due to the greater distance between minimums and maximums. So, when you compare the accounting standards, you can see that the management measures are spread out in different ways. This supports the research hypothesis that the way earnings are managed is different in regulatory and corporate reports for electricity distribution companies.

4.2 Distribution Difference Tests Analysis

The research variables were given initial normality tests (Jarque-Bera), which showed that all of them are significant (p-value < 0.05), which means that the null hypothesis of normality of their distribution is not true. This limits the robustness of using parametric tests in this particular case (paired t-test). According to Stevenson (2001), parametric tests require data normality, while non-parametric tests relax this assumption.

So, the non-parametric Wilcoxon signed-rank test, which is different from the paired t-test and checks for differences between distributions by adding up the ranks of groups where observations in one group depend on those in another, had to be used. Unlike parametric models that test the observed values, we can understand the ranks in this context as the relative position between observations within the data set. The Wilcoxon test results were conducted for two groups comparing earnings management levels via the Modified Jones Model by Dechow, Sloan, and Sweeney (1995) and the Modified Jones Model by Kothari, Leone, and Wasley (2005).

| Model | p-value | | |
|------------------------|--|-----------|--|
| Earnings Management | Sample 1 = Regulatory EM (REMD). Sample 2 = Corporate | | |
| (EM) – Dechow, Sloan, | EM (CEMD). w (rank sum, sample 1) = 317379 z = (317379 - | 0.0001*** | |
| and Sweeney (1995) | 294035) / 5153.75 = 4.5295 | | |
| Earnings Management | Sample 1 = Regulatory EM (REMK). Sample 2 = Corporate | | |
| (EM) – Kothari, Leone, | EM (CEMK). w (rank sum, sample 1) = $319092 \text{ z} = (319092 \text{ -}$ | 0.0001*** | |
| and Wasley (2005) | 294035) / 5153.75 = 4.8618 | | |

Table 4 - Wilcoxon Test Difference Results

Note. The null hypothesis denotes that the samples have equal distributions, and in the case of statistical significance (p-value < 0.05), the null hypothesis is rejected. *** = significant p-value at the 1% level.

The first model segregated the sample between earnings management under the regulatory standard (sample 1) and corporate standard (sample 2). The z statistic of the test was 4.5295 with a significant p-value at the 1% level, rejecting the null hypothesis of equality between the samples. Therefore, the obtained result shows that there are significant differences in earnings management levels determined by the Dechow, Sloan, and Sweeney (1995) model between the regulatory and corporate standards.

In the second model, we segregated the sample based on earnings management under the regulatory standard (sample 1) and corporate standard (sample 2), drawing on the findings of the Kothari, Leone, and Wasley (2005) study. The z statistic of the test was 4.8618 with a significant p-value at the 1% level, rejecting the null hypothesis of equality between the samples. Therefore, the obtained result shows that there are significant differences in earnings management levels determined by the Kothari, Leone, and Wasley (2005) model between the regulatory and corporate standards.

4.3 Discussion of Results

Users of accounting information from companies in regulated sectors need assurance about the quality of accounting information reported in their statements (ALEXANDRE; MELLO, 2017). Thus, according to Serrano III (2013), regulation should act to protect society in the execution of activities considered essential for its well-being.

ANEEL specifically regulates the electricity sector, where they prepare accounting information based on both corporate and regulatory standards (FERREIRA et al., 2021). According to Morais et al. (2019), the regulatory environment can influence the quality of accounting information positively or negatively, and among the negative effects of this environment is the increased discretion that regulation provides companies. For this reason, the research aimed to investigate the levels of discretion in the sector and whether these levels differ between the two disclosure standards.

The results indicate significant differences in earnings management levels between the standards, based on two different management models. Descriptive statistics showed that under the regulatory standard, there is positive earnings management, indicating that managers aim to increase results. Meanwhile, under the corporate standard, management levels were negative, indicating that managers aim to reduce results based on these standards. The findings show that different management interests exist for each type of accounting standard. Under the regulatory scope, the aim is to increase results, while under the corporate scope, the aim is to reduce them, with significant differences between the samples.

The findings align with the findings of Morais et al. (2019), who highlight that the regulatory process in economic sectors can lead to a reduction in informational quality. This is because managers of regulated companies may feel pressured to manipulate accounting information to satisfy specific regulatory objectives, such as enhancing indices, achieving targets, and minimizing profit variability, among others. These findings corroborate the study by Souza, Ribeiro, and Paulo (2024), which observed differences in the quality of accounting information between information disclosed under the corporate and regulatory standards in Brazilian companies. They also align with Niesten and Jolink's (2012) study,

which indicated that companies in the electricity sector, due to increased competition, have sought higher profits, leading to opportunistic behavior by their managers.

Given the existence of discrepancies in earnings management standards under regulatory and corporate standards, some practical implications are observed for users of information from these companies. Regulators should intensify their oversight and auditing of these organizations to address the observed differences and encourage companies to enhance the transparency of their reports. Investors should seek higher qualifications to analyze financial statements under different standards and conduct more detailed risk assessments based on these observed differences. Open dialogue between regulators, investors, and companies is important to strengthen mutual understanding and promote greater reliability in the reported financial statements, thus contributing to a more transparent and stable market.

Therefore, the research's findings hold significance as they alert various accounting information users in this sector to the significant differences between the information reported under the two standards. Furthermore, the reported differences are divergent based on the perspective of specific informational requirements, whether for the regulator, investors, or society itself. Furthermore, the reported differences vary depending on the specific informational requirements of the regulator, investors, or society itself.

5 CONCLUSIONS

This study aimed to verify the existence of significant differences in the levels of earnings management between corporate and regulatory reports for Brazilian electricity companies. We analyzed accounting information from 52 electricity distributors from 2011 to 2021, based on regulatory and corporate statements available on the ANEEL website, to achieve this.

We measured earnings management using two distinct models: the Modified Jones Model by Dechow, Sloan, and Sweeney (1995) and the Modified Jones Model by Kothari, Leone, and Wasley (2005). We analyzed each management model using information from corporate and regulatory statements, which yielded four variables for each specific management model.

The descriptive analyses of the variables reveal divergences in the measured levels of management, with the regulatory standard yielding positive averages and the corporate standard yielding negative averages. These results demonstrate different objectives between the standards, with regulatory reports having a greater interest in positively managing results, while corporate reports tend to reduce results outcomes.

Difference tests point to significant distribution differences in management levels between the two accounting standards applied to electricity companies. This supports the research hypothesis that regulatory and corporate standards present significant differences in their management levels.

According to the research, the quality of accounting information varies depending on the standards used to make reports. This shows different users that there are informational differences between the standards and that management may have-different goals when making this information to meet the informational needs of different user groups.

The results of this study may influence the accounting practices and information disclosure decisions of electricity companies. Companies may adjust their corporate disclosure strategies by seeking greater transparency in their regulatory and corporate reports, mainly due to the impacts of quality differences on investors' perceptions. Additionally, companies can conduct a review of accounting practices to better align with the needs of specific users of corporate and regulatory reports. Finally, by improving corporate governance and fostering closer alignment with the regulatory agency, we can better meet the expectations of various users while adhering to current regulations.

This study aids in the decision-making process of various agents by examining information from electricity companies, particularly distributors, and considering the impact of their services on society. If the study finds practices that lower results in order to meet certain goals, it could have effects on the

regulatory agency, the government, and society as a whole. These practices could lower tax bases, which would mean less money for public entities and fewer returns to society. Finally, investors and creditors may notice big differences in the quality of information between different standards, which could help them decide how to allocate resources.

Overall, the differences in management levels identified in the study have practical implications for various agents involved in the electricity sector. Investors can use the observed information for more informed decisions and risk assessments. Regulators have the opportunity to improve processes based on the differences identified in the regulations. The government faces tax impacts from result reduction practices, which can affect revenue collection. Given the negative effects observed from companies' earnings management, society has the power to push for changes. Finally, creditors, considering differences in informational quality, can adjust credit-granting decisions and define contractual terms accordingly.

The study's limitations primarily stem from the selection of a single informational quality measure and its implications. Another limitation is the use of only difference tests without analyzing possible effects of other attributes on these management levels.

Future studies should deepen their understanding of the observed differences in earnings management levels between accounting standards. Investigating the influence of corporate governance on earnings management practices in this sector can provide intriguing insights. Additionally, conducting a longitudinal analysis to evaluate how earnings management practices evolve over time, especially in response to changes in regulations or market conditions, would help better understand trends and patterns over different periods. Moreover, analyzing how differences in earnings management practices affect investors' perceptions and decisions, through studies on how variations in results influence stock prices, resource allocation by investors, and market stability can contribute to a better understanding of these observed differences.

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