

Symbolic Compliance or Effective Governance? Board Characteristics and Integrated Reporting in Brazil

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Abstract

Objective: Objective: To analyze the influence of Board of Directors' characteristics on the quality of integrated reports disclosed by publicly traded Brazilian companies, from the perspective of Institutional Theory, considering the mechanisms of coercive, normative, and mimetic isomorphism.

Method: A content analysis was conducted on the integrated reports of 35 companies listed on B3 between 2016 and 2023, with a quality index constructed based on the dimensions of content, history, assurance, and form. As suggested by the Hausman and Chow tests, fixed-effects multiple regression models were applied to test the hypotheses.

Results: The results revealed that gender diversity and board activity obtained negative and statistically significant effects on IR quality, while board independence and firm size showed no significant association. This evidence suggests a process of institutional compliance that is more symbolic than substantive, strongly influenced by regulatory (coercive isomorphism) and normative pressures.

Contributions: This study reinforces the applicability of Institutional Theory in the analysis of corporate governance, demonstrating that formal attributes of the Board of Directors do not always result in higher information quality. In practical terms, the findings highlight the need for public policies and corporate initiatives that strengthen board members' effective engagement with the disclosure process, going beyond a mere response to institutional pressures.

Keywords: Integrated Reporting; Board of Directors; Institutional Theory; Corporate Governance; Disclosure.

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1 Introduction

In a context of growing demand for transparency, social responsibility, and sustainability, integrated reporting (IR) has consolidated its role as a strategic communication tool between companies and stakeholders. Despite recent regulatory advancements, such as Resolution No. 14 of the Brazilian Securities and Exchange Commission (CVM) and Guidance No. 09 of the Brazilian Accounting Pronouncements Committee (OCPC), the quality of integrated reports still varies significantly among Brazilian companies, particularly in an institutional context marked by structural challenges in corporate governance.

IR seeks to integrate, in a concise and coherent manner, the financial and non-financial aspects of an organization, addressing the demands of different stakeholders (Slewinski, Camacho, & Sanches, 2015). The international literature has examined several dimensions of IR, ranging from its impact on the cost of capital (Zaro, 2021) and firm value (Barros, Frazão, Anjos & Aquino, 2018; Maria & Borgerth, 2022) to its adherence to global standards (Mantovani, Jael, Beserra & Santos, 2017) and its association with the characteristics of the Board of Directors (Vitolla, Raimo & Rubino, 2020).

Therefore, this study investigates the association between the characteristics of Boards of Directors—gender diversity, independence, activity, and size—and the quality of integrated reports published by Brazilian publicly traded companies. Considering the recent regulatory context in Brazil and the growing attention to Environmental, Social, and Governance (ESG) disclosure practices, this study employs a correlational design with fixed-effects panel regression analysis, based on the model proposed by Vitolla et al. (2020) and adapted to the Brazilian context.

Unlike studies replicated across multiple countries, this research focuses on an emerging institutional environment, where boards face challenges related to representation and efficiency. Recent regulatory standards, such as Guidance No. 09 of the OCPC, along with market demands, have driven companies to adopt more standardized reporting practices.

By empirically analyzing these interactions between governance and disclosure quality, the study provides evidence in the Brazilian context, offering insights for the literature as well as policymakers, investors, and business leaders. The results are expected to promote more robust governance practices and foster greater alignment with international corporate responsibility standards.

This article is structured as follows: Section 2 outlines the theoretical basis for integrated reporting and board of directors; Section 3 details the methodology; Section 4 discusses the results; and Section 5 presents the conclusions.

2 Theoretical Framework

2.1 Institutional Theory

Institutional Theory has been widely used to explain how external factors, social norms, and regulatory pressures shape organizational behavior (DiMaggio & Powell, 1983). Its use has intensified in the accounting field, particularly in studies on corporate governance and the disclosure of non-financial information, such as integrated reporting (IR) (Soeiro & Wanderley, 2019; Matias-Pereira, 2021; Reis & Moraes, 2021).

As Mohammadnezhad, Ayazi, and Naderian (2024) note, the three classic institutional mechanisms—coercive, normative, and mimetic—exert significant influence on the adoption of ESG practices. Coercive pressures stem from legal and regulatory requirements that compel organizations to adopt certain practices in order to comply with frameworks established by government agencies and regulatory bodies. In the Brazilian context, instruments such as CVM Resolution No. 14 of 2020 and OCPC Guidance No. 09 exemplify these forces by formally encouraging the preparation and dissemination of integrated reports (Calado, Rodrigues, & Cavalcante, 2024).

Normative pressures arise from the growing professionalization of corporate governance, expressed through the dissemination of standards, values, and expectations of technical conduct among professionals in the field. This dynamic is reinforced by factors such as formal education, specialized training, and participation in associations such as the Brazilian Institute of Corporate Governance (IBGC), which set parameters for best practices (Vitolla et al., 2020; Mohammadnezhad et al., 2024; Vidigal & Felisoni, 2025).

The mimetic mechanism, in turn, arises in contexts of institutional and market uncertainty, leading organizations to imitate the practices of companies perceived as leaders or benchmarks in governance and disclosure. This imitative behavior, according to Reis and Moraes (2021), is particularly evident in emerging economies such as Brazil, where regulatory and cultural structures are still consolidating, favoring the adoption of practices that are more symbolic than substantive.

Table 1 summarizes the main characteristics of the institutional pressures observed in the Brazilian context, detailing the actors involved, the organizational motivations, and the predominant nature of IR adoption.

Table 1

Institutional Pressure and Characteristics of the Adoption of integrated reporting in Brazil

Pressure	Example of organizations	Motivation for Adoption	Characteristic of Adoption	Source
Coercive	State-owned companies, universities	Compliance with legal obligations (e.g., TCU*, Law No. 13,303/2016)	Formal, compliance-oriented	Calado et al. (2024); Maria et al. (2022)
Normative	Large private companies	Adherence to professional standards and recommendations from regulatory bodies	Formal, seeking professional legitimacy	Reis and Moraes (2021); Maria et al. (2022)
Mimetic	Publicly traded private companies	Imitation of leaders and international best practices	Aesthetic and symbolic, reputation-oriented	Reis and Moraes (2021)

Note. Adapted from Calado et al. (2024); Maria et al. (2022); Reis and Moraes (2021).

*TCU = Federal Court of Accounts.

It is important to highlight that these three mechanisms do not operate in isolation but interact in a complex manner, influencing both organizational structures and companies' disclosure practices and informational performance (Hossain & Hammami, 2009; Amorim et al., 2017).

Based on this theoretical foundation, Table 2 presents the operationalization of the independent variables, showing how each characteristic of the board of directors relates to the mechanisms of institutional isomorphism and underpins the hypotheses of this study.

Table 2

Operationalization of the board's characteristics and its relationship with the mechanisms of institutional isomorphism.

Variable	Isomorphism Mechanism	Justification
Gender diversity	Normative	International standards and associations such as IBGC exert pressure for gender representation
Independence	Normative	Result of recommendations on corporate governance best practices issued by regulatory agencies and professional bodies.
Activity	Coercive / Normative	Reflects regulatory requirements (e.g., CVM) and expectations for more frequent meetings.
Size	Mimetic	Arises from the imitation of board structures of leading companies or sector benchmarks in contexts of uncertainty.

Note. adapted by the authors based on DiMaggio e Powell (1983), Mohammadnezhad et al. (2024), Vitolla et al. (2020) and Fernandes (2020).

In this study, the characteristics of boards of directors are analyzed as potential institutional channels through which external pressures manifest in the quality of integrated reports, broadening the debate on the boundaries between regulatory compliance and the substantive effectiveness of governance practices in Brazil.

2.2 Integrated Reporting

IR offers companies three major advantages. The first concerns internal benefits, such as improved resource allocation and communication with stakeholders, which enhance the institutional image (Hoque, 2017; Simona, Mari & Andrea, 2018). The second advantage involves meeting stakeholders' information needs by integrating financial and non-financial data in a clear and coherent manner. The third advantage relates to regulation and compliance with international best practices, enabling companies to demonstrate responsiveness to societal demands and position themselves as transparent and responsible organizations (Simona et al., 2018).

Studies such as Silva (2020) demonstrate that IR quality influences firm market value and serves as a strategic communication mechanism with the stock market (Maria et al., 2022). However, Pistoni, Songini, and Bavagnoli (2018) emphasize that IR quality remains low in many companies, which comply with the expected format but disclose little relevant information on intellectual capital, business models, strategies, and value creation processes.

To measure this quality, Pistoni et al. (2018) propose a model with 23 variables grouped into four areas: history, assurance and reliability, content, and form. Among these, the dimensions that stand out include stakeholder relationships, completeness and reliability, strategic focus and future orientation, information connectivity, materiality, conciseness, consistency, and comparability.

2.3 Board of Directors

The literature on corporate governance has identified several board attributes as factors associated with disclosure quality. Among the most frequently examined are gender diversity, director independence, board activity (measured by number of meetings), and board size. While these relationships are well documented in developed markets, empirical evidence remains scarce in emerging markets such as Brazil, where the regulatory environment and governance practices differ significantly.

The main functions of the board of directors are to represent shareholders' interests and oversee executive decisions of senior management (Ben-Amar & McIlkenny, 2015; Perlin, Kirch, Vancin, & Mastella, 2021). Its role is strategic, encompassing the oversight of integrated report preparation and approval. The board also draws on the content of these reports to evaluate organizational performance and guide corporate governance (Vitolla et al., 2020).

Among the most studied characteristics of the boards of directors is gender diversity. McGuinness, Vieito, and Wang (2017) highlight that boards with female participation tend to demonstrate better financial disclosure, sustainability, and voluntary information practices. Gerwanski, Kordsachia, and Velte (2019) found that this diversity positively contributes to the quality of materiality in integrated reports. Gul, Srinidhi, and Tsui (2007) show that the presence of women is associated with less earnings management and higher accounting quality.

These findings support the first hypothesis of this study: H1. The proportion of women on the board of directors is positively associated with the quality of integrated reports.

Another relevant characteristic is board independence. Studies such as Cornett, Marcus, and Tehranian (2008) indicate that boards with a higher proportion of independent directors are associated with lower levels of earnings management. Chi, Hung, Cheng, and Lieu (2015) reinforce this finding in family businesses, showing that board independence enhances the quality of accounting information.

Thus, we have the second hypothesis: H2. The proportion of independent directors on the board of directors is positively associated with the quality of IR.

Regarding board activity, studies such as Kanagaretnam, Lobo, and Whalen (2007) and Xie, Davidson, and DaDalt (2003) suggest that more active boards, with a greater number of meetings, are associated with lower information asymmetry and higher-quality disclosures. Frias-Aceituno, Rodriguez-Ariza, and Garcia-Sanchez (2013) argue that effective monitoring requires adequate meeting frequency.

Thus, the third hypothesis is formulated: H3. The number of annual board meetings is positively associated with the quality of IR.

Finally, board size is also a factor investigated. Gandía (2008) and Xie et al. (2003) point out that larger boards tend to encompass a greater diversity of opinions and experiences, which contributes to more complete disclosure. Fernandes (2020) notes that preparing IR requires interdisciplinary knowledge, which favors the composition of broad-based boards.

Based on this, it is proposed: H4. The number of members on the board of directors is positively associated with the quality of IR.

Considering the possibility of more complex relationships between governance variables and the quality of IR, complementary hypotheses are also proposed:

H5. The relationship between board gender diversity and IR quality is stronger in companies operating in sectors with high environmental impact.

H6. The relationship between the number of board meetings and the quality of IR is non-linear, with diminishing gains as the number of meetings increases.

H7. Companies operating in sectors with greater ESG regulation tend to demonstrate higher IR quality, regardless of board characteristics.

In summary, the board of directors represents a central governance body that directly influences the quality of IR.

3 Method

3.1 Sampling

The documentary approach began with corporate sustainability reports made available by companies listed on B3 through their websites. The final sample comprised 35 companies that consistently published integrated reports between 2016 and 2023. The sample selection was based on the public availability of the reports and the completeness of the information required to code the variables of interest.

The sample was constructed to ensure representation across different sectors and company sizes, mitigating selection bias related to disclosure criteria. However, there is a natural predominance of companies in environmentally sensitive industries (68%), such as energy, mining, pulp and paper, and food, according to stock exchange classifications. This concentration reflects greater regulatory and institutional pressure on these sectors, which tend to adopt more structured and transparent reporting practices and, therefore, are more frequently included in such analyses. The companies vary in size and are mostly medium to large, as proxied by revenue and total assets. Examples include BRF, Eletrobras, WEG, JBS, and CPFL Energia, which stand out for their operations in strategic and environmentally sensitive sectors.

3.2 Proposed model

The analytical model is based on Vitolla et al. (2020), adapted to the Brazilian context. The regression was performed using panel data with fixed effects, as indicated by the Hausman, Chow, and Breusch-Pagan tests. The general equation is:

$$IRQ = \beta_0 + \beta_1 BOARDSIZE + \beta_2 BOARDIND + \beta_3 BOARDDIVt + \beta_4 BOARDACT + \beta_5 CSRCOM + \beta_6 ROE_{it} + \beta_7 SIZE + \beta_8 AGE + \beta_9 COVID19_{it} + \beta_{10} ENVSEN + \beta_{11}(BOARDDIV \times ENVSEN) + \varepsilon_{it} ENVSEN + \beta_{11}(BOARDDIV \times ENVSEN) + \varepsilon_{it}$$

Where:

IRQ: represents the quality of integrated reporting, through the total score across content, history, assurance and reliability, and form;

BOARDSIZE: number of board members;

BOARDIND: percentage of independent board members;

BOARDDIV: proportion of women on the Board of Directors;

BOARDACT: number of meetings per year;

CSRCOM: dummy variable equal to 1 if firm has a corporate social responsibility/sustainability committee;

ROE: control variable representing return on equity data;

SIZE: control variable measuring firm size;

AGE: control variable representing firm age as a proxy for stability;

COVID 19: dummy variable equal to 1 for the years 2020 and 2021, which correspond to the COVID-19 pandemic period;

ENVSEN: dummy variable for environmentally sensitive sectors;

BOARDDIV × ENVSEN: interaction term testing the sectoral effect of diversity (H5); and

ε_{it}: model error.

The choice of fixed effects was motivated by the need to control for unobservable, time-invariant characteristics across companies. The inclusion of interaction terms and quadratic variables (tested in alternative model specifications) enhances the ability to capture nonlinear and contextual effects, thereby strengthening the robustness of the econometric model.

3.3 Model variables

3.3.1 Dependent variable

The dependent variable, IRQ (IR Quality Index), comprises four dimensions: content, history, assurance, and form. Each dimension is measured using objective criteria proposed by Pistoni et al. (2018), with the total score ranging from 0 to 75. Data were coded through content analysis, considering the degree of adherence to IIRC principles and disclosure practices.

Table 3 presents the measurement of Integrated Reporting Quality (IRQ) across content, history, and assurance and reliability:

Table 3

Variables measuring Integrated Reporting Quality: content, history, and assurance and reliability.

VARIABLE CONTENT	
Variable Description Content	Assessed according to eight elements of the IIRC framework: organizational overview and external environment, strategy and resource allocation, outlook, performance, governance, basis of presentation, risks and opportunities, and business model. In addition, the concepts of capital and the value creation process were considered, totaling 10 content elements.
Expected sign	Positive.
Data measurement	0 (absence of the content element) 1 (presence of the content element, but with poor description and little reference to the guiding principles of IR); 2 (presence of the content element with some quantitative information and limited reference to the guiding principles of IR); 3 (presence of the content element with a balanced description, an average amount of information, and references to the guiding principles of IR); 4 (presence of the content element with detailed description and many references to the guiding principles of IR); and 5 (very high quality of the content element, with reference to nearly all guiding principles of IR).
Score	Minimum 0, maximum 50.
Reference	Pistoni et al. (2018); Vitolla et al. (2020).
Data source	Integrated reports of Brazilian companies from 2016 to 2023.
VARIABLE HISTORY	
Variable Description History	Assesses whether the reports include the following: introduction, firm objectives, motivations for reporting, individuals responsible for the process, main consumers, compliance with disclosure standards, and CEO commitment.
Expected sign	Positive.
Data measurement	For each item, 0 (absence) or 1, otherwise
Score	Minimum 0, maximum 7.
Reference	Pistoni et al. (2018); Vitolla et al. (2020).
Data source	Integrated reports of Brazilian companies from 2016 to 2023.

VARIABLE ASSURANCE AND RELIABILITY	
Variable Description Assurance and Reliability	Based on the presence or absence of the following: internal audit-third party verification, awards, and recognition of intellectual capital.
Expected sign	Positive.
Data measurement	For each item, 0 (absence) or 1, otherwise
Score	Minimum 0, maximum 3.
Reference	Pistoni et al. (2018); Vitolla et al. (2020).
Data source	Integrated reports of Brazilian companies from 2016 to 2023.

Note. Developed by the authors based on the content analysis of the integrated reports of companies listed on B3 between 2016 and 2023.

Table 3 shows that history, assurance, and reliability criteria were sufficient to identify the absence or presence of each element in the reports. For content, however, we analyzed sentences in their context, coding each of the elements in the areas mentioned above. Subsequently, by grouping similar sentences, the interpretation phase began, aiming to uncover trends, patterns, or implicit signals that could strengthen the present study, and then scoring each of the required elements (Bardin, 2004; Nossa, 2002).

Table 4

Variable measuring Integrated Reporting quality: Form.

VARIABLE FORM	
Variable Description Form	It includes the following criteria: user accessibility to the report, conciseness, and readability/ clarity.
Expected sign	Positive.
Data measurement	<p>Accessibility was measured according to the following scale: 0 (not applicable);</p> <ul style="list-style-type: none"> • 1 (report available only in print); • 2 (report available only as a PDF file); • 3 (report available both on the company's website and as a PDF file); • 4 (report accessible online through a highly interactive platform on the company's website; and • 5 (report highly accessible, with a highly interactive web platform and additional access through social media. <p>Conciseness was measured by the number of pages in the report:</p> <ul style="list-style-type: none"> • 0 (not applicable); • 1 (more than 200 pages); • 2 (between 151 and 200 pages); • 3 (between 101 and 150 pages); • 4 (between 51 and 100 pages); and • 5 (fewer than 50 pages). <p>Readability and clarity were measured as follows:</p> <ul style="list-style-type: none"> • 0 (absence of elements that facilitate reading and comprehension); • 1 (qualitative description with few graphs or tables and no summary, glossary, or list of abbreviations); • 2 (adequate presence of graphs and tables, with a minimally detailed index); • 3 (graphs and tables in balance with the narrative flow); • 4 (effective use of graphs and tables, with a detailed index and hyperlinks); and • 5 (very good layout of the index, graphs, and tables, all clearly connected to the qualitative narrative flow.
Score	Minimum 0, maximum 15.
Reference	Pistoni et al. (2018); Vitolla et al. (2020).
Data source	Integrated reports of Brazilian companies from 2016 to 2023.

Note. Developed by the authors based on the adapted criteria proposed by Pistoni et al. (2018), Bardin (2004) and Nossa (2002).

In Table 4, regarding form, the same analytical approach used for content was applied, drawing on Bardin (2004) and Nossa (2002). However, for each element of the Form variable, a scale from 0 to 5 was employed, with distinct qualitative criteria for each item. Consequently, this variable required a more refined analysis than the others.

The reports were coded by a single researcher. To mitigate potential judgment bias, a pilot analysis and prior training phase were conducted using a test sample of reports, in accordance with Bardin's (2004) methodological recommendations, thereby ensuring internal consistency in the categorization process.

Given the aspects and scores presented, IR quality is represented by the sum of the scores of these four areas described in the tables above; therefore, each integrated report can reach a maximum score of 75.

3.3.2 Independent and control variables

To improve the quality of the regression model, in addition to the independent variables BOARDSIZE, BOARDIND, BOARDDIV, and BOARDACT, several control variables were included: CSRCOM, ENVSEN, ROE, SIZE, AGE, and COVID-19, as shown in Table 5.

Table 5
Study Variables.

Acronym	Description	Reference	Data Source	Expected Sign
BOARDSIZE	Independent variable measuring the number of members on the board of directors.	Frias-Aceituno et al. (2013); Gandía (2008); Xie et al. (2003).	FR*, item 12.5/6	+
BOARDIND	Independent variable measuring the percentage of independent directors.	Cornett et al. (2008); Chi et al. (2015).	FR*, item 12.5/6	+
BOARDDIV	Independent variable representing the proportion of women on the board of directors.	McGuinness et al. (2017); Gerwanski et al. (2019); Gul et al. (2007)	FR*, item 12.5/6	+
BOARDACT	Independent variable measuring the number of annual meetings of the board of directors.	Vitolla et al. (2020); Kanagaretnam et al. (2007); Xie et al. (2003); Frias-Aceituno et al. (2013).	FR*, item 12.3	+
CSRCOM	Dummy variable equal to 1 if the firm has a corporate social responsibility/sustainability committee.	Ahmed Haji and Anifowose (2016).	FR*, item 7.8	+
ROE	Variable representing return on equity.	Vitolla et al. (2020).	Comdinheiro®	+
SIZE	Control variable measuring firm size, calculated as the natural logarithm of total assets.	Frias-Aceituno et al. (2014); Ghani, Jamal, Puspitasari and Gunardi (2018).	Comdinheiro®	+
AGE	Firm age as a proxy for stability, calculated as the interval from the firm's first trading on B3 until the end of 2020.	Vitolla et al. (2020)	Comdinheiro®	+

Note. Developed by the authors based on information extracted from the integrated reports of companies listed on B3, supplemented with financial data from the Comdinheiro® system and the theoretical formulations of previous studies cited in the table. *FR = Brazilian Reference Form (*Formulário de Referência*), an annual disclosure document required by the Brazilian Securities and Exchange Commission (CVM), similar in scope to the SEC's Form 20-F.

CSRCOM is expected to have a positive impact on IR quality. Return on equity (ROE) was included in the regression model, given that profitability influences companies' decisions regarding the allocation of resources to the IR process (Vitolla et al., 2020). In addition, this variable is necessary to control for the effect of firm size on ROE.

Previous studies indicate a relationship between firm size (SIZE) and the degree of integration adopted in IR; therefore, this variable is expected to have a positive impact (Frias-Aceituno, Rodríguez-Ariza, & García Sánchez, 2014; Ghani et al., 2018). Likewise, the longer a company has been listed on the stock exchange (AGE), the higher the quality of information disclosed in its IR, which also suggests a positive impact (Vitolla et al., 2020).

The COVID-19 dummy variable was included in the model to capture the effects of the COVID-19 pandemic, assuming a value of 1 for the years 2020 and 2021. According to Gulzar, Tabash, Ahmad, Yazdani, and Alam (2023), the pandemic significantly affected corporate governance practices, altering metrics such as board size, board independence, the proportion of women on the board, the frequency of board meetings, and the size of the audit committee. It highlighted the need for resilience and adaptability, forcing companies to adjust their governance practices to address unexpected challenges (Gulzar et al., 2023).

Furthermore, the Harvard Law School Forum on Corporate Governance (2021) highlighted that the pandemic fostered greater integration of companies into larger corporate networks and increased ownership, strengthening resilience in times of crisis. It also amplified the importance of ESG issues, with growing pressure from institutional investors and the public for companies to address these dimensions more comprehensively (Harvard Law School Forum on Corporate Governance, 2021).

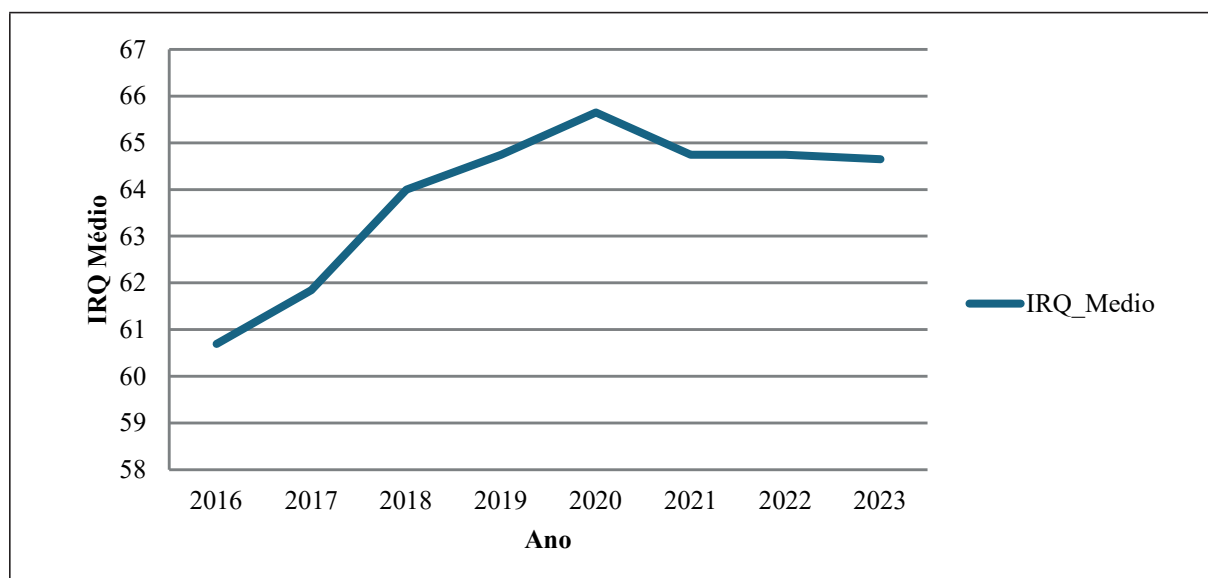
Al-Hashimi, Al-Sulaiti, Al-Emadi, and Al-Ali (2021) demonstrated that robust corporate governance practices helped companies mitigate the negative effects of the pandemic in Malaysia, underscoring the importance of effective board leadership and rigorous oversight during times of crisis.

The ENVSEN variable is a dummy equal to 1 for companies in environmentally sensitive sectors, such as energy, mining, pulp and paper, and food, reflecting stronger regulatory and social pressures on ESG practices. ENVSEN also supports hypothesis H7, which states that more demanding regulatory contexts enhance IR quality. To test for contextual effects, an interaction between board gender diversity (BOARDDIV) and ENVSEN was included to examine whether the relationship between diversity and IR quality is stronger in these sectors (hypothesis H5). This interaction captures the effect of gender diversity under different regulatory contexts.

3.4 Complementary temporal analysis

To complement the statistical analysis and provide visual support for the results, this study employed a graphical approach to observe the temporal evolution of IR quality (IRQ) between 2016 and 2023.

Figure 1 presents the trend in the average annual IRQ, demonstrating progressive growth over the analyzed period. This increase can be interpreted as a reflection of a maturation of non-financial disclosure practices in Brazil, driven by institutional, regulatory, and market pressures.

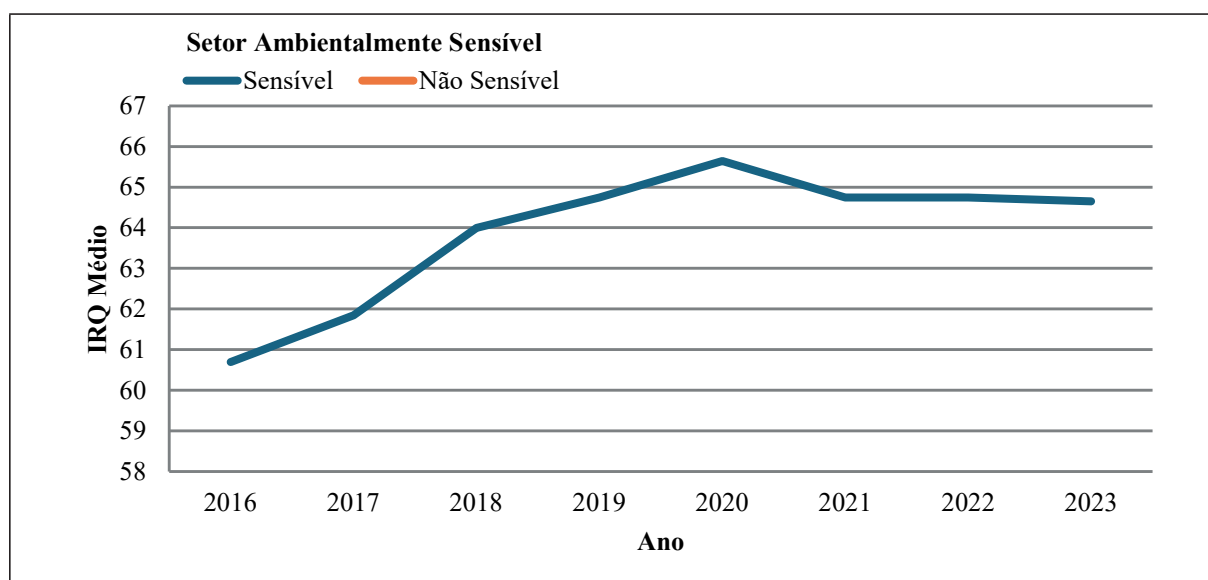


Note. Study data based on the IR of the sample companies.

Translate: Mean IRQ, Year.

Figure 1. Evolution of Mean IRQ (2016–2023).

Additionally, Figure 2 shows the behavior of mean IRQ separated into environmentally sensitive and non-sensitive sectors. The results indicate that companies in sectors with greater environmental impact, such as energy, mining, and pulp and paper, consistently disclose higher-quality integrated reports. This supports hypothesis H7, which posits that contexts with greater regulatory requirements foster more robust disclosure practices.



Note: eDeveloped by the authors based on the sectoral classification of environmental sensitivity and data from IRs.

Translate: Environmentally Sensitive Sector; Non-sensitive; Sensitive; Mean IRQ ; Year.

Figure 2. Evolution of the Mean IRQ by Environmental Sensitivity (2016–2023).

These visual results provide the empirical foundation for the econometric analyses presented in the following section.

4 Analysis and Discussion of Results

4.1 Presentation of results

Table 6 presents the descriptive statistics of the variables used in this study between 2016 and 2023. The results include means, standard deviations, minimum and maximum values, and positional measures (percentiles).

Table 6

Descriptive statistics of variables (2016 – 2023)

	Mean	SD	CV (%)	Minimum	Maximum	25%	Median	P75%
IRQ	63.89	5.72	8.95	46.0	74.0	60.0	64.5	68.0
BOARDSIZE	8.43	1.62	19.26	5.0	14.0	7.0	8.5	9.0
BOARDIND	41.18	20.95	50.88	0.0	100.0	25.0	37.5	55.56
BOARDDIV	10.05	10.43	103.83	0.0	33.33	0.0	10.0	14.29
BOARDACT	24.71	21.57	87.3	4.0	200.0	14.0	23.0	30.0
ROE	15.33	24.59	160.46	-87.65	243.38	8.68	16.47	20.82
SIZE	9.8	1.22	12.49	7.31	12.11	9.27	9.94	10.64
AGE	66.02	37.95	57.49	16.0	180.0	24.0	63.0	91.25

Note. Data prepared by the authors based on the analysis of integrated reports from companies listed on B3 (2016-2023).

The mean IRQ (Integrated Reporting Quality) was 63.89, indicating a slightly higher quality than that found by Vitolla et al. (2020), whose mean was 57.21. This result provides a relevant empirical basis for testing hypotheses H1 through H7.

Variables such as BOARDDIV and BOARDIND, associated with hypotheses H1 and H2, had mean values of 10.05% and 41.18%, respectively, reflecting moderate levels of diversity and independence in the boards analyzed. These results contextualize the findings presented in the regression section and reinforce the relevance of testing the influence of these attributes on IR quality.

The BOARDACT variable, associated with hypothesis H3, showed a mean of 24.71 meetings per year—a relatively high value compared to the original study. The mean BOARDSIZE was 8.43 members, providing the empirical basis for H4.

Regarding ROE (H6), the mean of 15.33% combined with a high coefficient of variation (160.46%) indicates substantial dispersion in firms' financial performance, justifying its inclusion as a relevant control variable to assess its relationship with IR quality.

ENVSEN, associated with H5 and H7, presented a constant value, preventing its inclusion in the econometric model. Nevertheless, graphical and descriptive analyses indicated that most companies operate in sectors with significant environmental impact.

Finally, the COVID-19 variable was incorporated to capture potential changes in disclosure behavior during the health crisis. Its inclusion helps isolate the effects of this relevant external event on reporting practices.

The most explanatory model was the pooled model, with a coefficient of determination of 33.8%, indicating that the set of variables explains 33.8% of the variation in IRQ. The least explanatory was the fixed-effects model, with 7.74%, which also excludes one variable. However, to determine the best fit, the Hausman and Chow tests were applied. The Hausman test returned a p-value of 0.000, rejecting the random-effects hypothesis and supporting the fixed-effects model. The Chow test, which compares the pooled and fixed-effects models, yielded $p = 0.001$. Therefore, the fixed-effects model is recommended, as it controls for heterogeneity among companies and presents significant coefficients that indicate important relationships with IRQ, as shown in Table 7 below.

Table 7

Estimated coefficients in the fixed effect model for IRQ

Variable	Coefficient	p-value	Hypothesis	Interpretation
BOARDSIZE	0.270	0.734	H4	Not significant. Board size does not affect IRQ.
BOARDIND	-0.577	0.334	H2	Not significant. board independence does not affect IRQ.
BOARDDIV	-1.654	0.000	H1	Significant and negative. Greater gender diversity is associated with lower IRQ, contrary to the hypothesis.
BOARDACT	-0.924	0.019	H3	Significant and negative. More meetings are associated with lower IRQ, also contrary to the hypothesis.
ROE	-1.432	0.000	H6	Significant and negative. Return on equity reduces IR quality, indicating a trade-off between performance and disclosure.
SIZE (ln)	2.173	0.000	—	Significant and positive. Larger firms produce higher-quality integrated reports.
AGE	-2.567	0.000	—	Significant and negative. Older firms have lower IR quality.
COVID-19	-0.812	0.072	H7	Marginally significant ($p < 0.10$). The pandemic tends to reduce IR quality.

Note. Results of the fixed-effects regression, based on data from the integrated reports of the companies analyzed between 2016 and 2023.

The analysis of the fixed-effects model reveals important findings regarding the determinants of IRQ in Brazilian companies. Among the variables tested, some showed statistical significance, allowing the proposed hypotheses to be corroborated or refuted, while others exhibited no statistical effect on IRQ.

Starting with the BOARDSIZE variable, associated with hypothesis H4, the coefficient was not statistically significant ($p = 0.734$), indicating that the size of the board of directors does not directly influence IR quality. This result aligns with studies such as Correia and Amaral (2009) and Jensen (1993), which suggest that excessively large boards may become inefficient due to coordination difficulties and a higher likelihood of internal conflicts. Therefore, larger boards do not necessarily lead to better integrated disclosure practices.

Regarding BOARDIND (H2), which represents the proportion of independent directors, no significant effect was observed ($p = 0.334$). This result is consistent with Brazilian studies, such as Brugni, Fávero, Klotzle, & Pinto (2018), which show that many companies in Brazil have not yet fully adopted the good governance practices suggested by the IBGC, such as ensuring at least 20% of independent directors. This suggests that the mere presence of independent directors, without sufficient empowerment to exert meaningful influence, may not produce the expected improvements in transparency and reporting quality.

In contrast, BOARDDIV (H1), which measures gender diversity on the board, presented a negative and highly significant coefficient ($p < 0.01$). This finding is unexpected, as it contradicts McGuinness et al. (2017) and Gul et al. (2007), who argue that the presence of women on boards tends to increase sensitivity to ESG issues and, consequently, enhance reporting quality. Fernandes (2020) notes, however, that female representation on boards remains incipient in Brazil and may be more closely linked to symbolic institutional pressures than substantive change in governance practices. This institutional bias, interpreted through the lens of normative isomorphism in institutional theory, may explain why the presence of women did not lead to improvements in IRQ in this study.

BOARDACT, which measures the frequency of board meetings (H3) also showed a negative and significant effect ($p = 0.019$). This result is consistent with Ahmad, Rashid, and Gow (2017) and Forte, Silva, and Abreu (2021), who argue that frequent meetings may reflect a context of instability or crisis rather than a more active and effective governance environment. In the Brazilian context, where the cost of board meetings is high, greater meeting frequency may indicate reactive overload rather than a proactive strategy aimed at enhancing communication quality.

Another relevant result concerns ROE (H6), which showed a negative and highly significant coefficient ($p < 0.01$). This finding suggests a trade-off between financial performance and IR quality, as discussed by Liu and Anbumozhi (2009). Firms with high returns may choose to allocate fewer resources to in-depth disclosure processes, confident that good financial results are already sufficient to satisfy stakeholders. This behavior is consistent with the findings of AlQudah and Pervin (2019) and Saks (2018), who argue that good financial performance does not always align with transparent governance practices, particularly in contexts with weaker institutional pressure.

In contrast, company size (SIZE) showed a positive and statistically significant impact on IRQ ($p < 0.01$), consistent with Frias-Aceituno, Rodriguez-Ariza, and Garcia-Sanchez (2014), Magerakis, Gkillas, Tsagkanos, and Siriopoulos (2020), and King and Santor (2008). Larger firms generally have more resources, stronger internal control systems, and greater exposure to stakeholder pressure, which encourages the adoption of more robust IR practices.

Company age (AGE) showed a negative and significant coefficient, indicating that older companies tend to produce lower-quality reports. This finding is consistent with Melloni, Stacchezzini, and Lai (2016) and Vitolla et al. (2020), who argue that older organizations often operate with more rigid structures and exhibit resistance to change, which can hinder the adoption of new reporting standards, such as IR.

Finally, the COVID-19 variable was marginally significant ($p = 0.072$), suggesting that the pandemic had a negative impact on IR quality, although not at conventional levels of statistical significance. Gulzar et al. (2023) and the Harvard Law School Forum on Corporate Governance (2021) note that, during the pandemic, corporate priorities were reconfigured, with reduced emphasis on disclosure and greater attention to emergency measures, which may have affected the consistency and depth of the information disclosed.

CSRCOM, initially included in the model, was excluded due to high multicollinearity. According to Faveiro and Belfiore (2017), such exclusion does not compromise the validity of the model's results, provided that the structural foundations of the organizations remain stable over time, as was the case in this sample.

4.2 Discussion of results

Given the empirical findings, the analysis indicates that the hypotheses formulated in this study were not statistically confirmed, contradicting the results reported by Vitolla et al. (2020). This discrepancy highlights institutional and cultural dynamics specific to the Brazilian context, which require a broader interpretation through the lens of Institutional Theory. With respect to coercive isomorphism, the regulatory imposition of CVM Resolution No. 14 of 2020 is particularly relevant. Together with OCPC No. 09 and the guidelines of the International Integrated Reporting Council (IIRC), it mandated the preparation of integrated reports by listed companies wishing to disclose financial and non-financial information. This regulatory framework may have contributed to a standardization of reporting practices, reducing the influence of internal governance characteristics, such as board size (BOARDSIZE) and independence (BOARDIND), on the IR quality. Consequently, even companies with different governance structures may have been compelled to adopt similar disclosure standards, neutralizing the effects of these variables.

In turn, normative isomorphism is reflected in institutional pressures for companies to adopt practices considered legitimate, such as more diverse or more active boards. In the Brazilian context, however, these practices still appear to have a symbolic character. Fernandes (2020) and García-Sánchez, Rodríguez-Ariza, and Frías-Aceituno (2013) emphasize that the adoption of good governance practices—such as the inclusion of women on boards (BOARDDIV)—often responds more to external expectations, particularly from stakeholders and regulators, than to genuine internal change. This may help explain why variables such as BOARDDIV and BOARDIND, although widely promoted as best practices, were not significantly associated with improved IR quality.

Furthermore, regulatory and normative pressures do not act in isolation. Cultural aspects also play a fundamental role in shaping the homogenization of reporting practices in Brazil. As Hossain and Hammami (2009) argue, voluntary disclosure is strongly influenced by cultural, legal, and motivational contexts. In the Brazilian case, a historically more hierarchical corporate culture, characterized by a low emphasis on transparency and a reactive regulatory profile, may lead to a more formal than substantive adoption of practices such as board diversity or independence. This reinforces the view that traditional governance mechanisms have limited effects on IR quality when not accompanied by deeper organizational transformations.

Additionally, the homogeneity observed in the reports may be reinforced by the sample composition. Most of the companies analyzed operate in environmentally sensitive sectors, which are subject to stronger regulatory and institutional pressures. In this context, as noted by Amorim, Oliveira, Ponte, and Abreu (2017) and Reis et al. (2021), the adoption of mimetic or normative behaviors is common, leading to a standardization of practices that hardly differentiate companies and thereby weaken the explanatory power of governance variables.

Finally, the COVID-19 pandemic, represented by the dummy variable included in the model, showed a marginally significant effect. Although it did not reach conventional levels of statistical significance, this finding suggests that crisis contexts tend to negatively affect IR quality, as reported by Gulzar et al. (2023) and the Harvard Law School Forum on Corporate Governance (2021). During periods of instability, firms often shift focus toward risk management and operational continuity, relegating structured and in-depth reporting initiatives to the background.

In regulatory terms, the findings suggest that simply mandating disclosure, as established by CVM Resolution No. 14, does not ensure the effectiveness of IR. Beyond standardizing the format, future policies could focus on fostering the substance of disclosure practices by developing qualitative indicators that assess the effective engagement of boards of directors with ESG issues, the integration of sustainability into corporate strategy, and the incorporation of ESG targets into executives' variable compensation.

These findings, taken together, provide important practical implications. For boards of directors, it is clear that simply adopting practices such as greater diversity or holding more meetings does not guarantee improvements in reporting quality. It is necessary to invest in the effectiveness of these practices, strengthening the board's deliberative role and fostering an internal culture of engagement with ESG issues. Regulators face the challenge of designing policies that are not limited to form but instead encourage structural and cultural changes that enhance the effectiveness of reporting. Institutional investors, meanwhile, should be aware of the risk of overvaluing conventional governance indicators. Rather than limiting themselves to verifying formal compliance with guidelines, they need to understand the institutional and cultural incentives that shape actual disclosure practices in Brazilian companies.

5 Final Considerations

This study aimed to analyze the influence of the characteristics of the board of directors on the quality of integrated reports in Brazilian companies listed on B3 between 2016 and 2023. Based on the adaptation of the model proposed by Vitolla, Raimo, and Rubino (2020) to the national context, variables such as size, independence, gender diversity, and board activity were investigated, along with control variables such as return on equity, company size, company age, and the effects of the COVID-19 pandemic.

The empirical results demonstrated that, contrary to expectations, board characteristics were not statistically significant or, when they were, the effects ran counter to expectations. Gender diversity and board activity, for example, showed a negative relationship with the quality of integrated reports, contradicting the hypothesis that practices associated with good governance would result in better disclosure. These findings reinforce the need for a more in-depth analysis of the institutional factors that shape organizational behavior in Brazil.

In light of Institutional Theory, the results can be interpreted through the mechanisms of coercive and normative isomorphism. The former is expressed in the legal requirement to prepare integrated reports, imposed by CVM Resolution No. 14/2020, which has promoted a homogenization of reports, limiting the impact of corporate governance specificities. The latter, normative in nature, refers to the pressure to adopt best practices such as diversity and independence, which, although implemented, still tend to be symbolic and have little practical impact on reporting quality.

Additionally, the cultural and sectoral homogeneity of the sample, composed mostly of companies in environmentally sensitive sectors, helps explain the results. As argued in the literature, the cultural and institutional context significantly influences the degree of adoption and effectiveness of disclosure practices, especially in countries like Brazil, where traditional organizational structures and hierarchical cultures prevail.

In practical terms, the findings offer relevant insights. For boards of directors, the results highlight that merely formally adopting governance practices does not guarantee transparency and accountability. It is essential to rethink the board's strategic role and foster internal changes that transcend regulatory compliance. For regulators, the results suggest the importance of public policies that not only standardize reporting but also encourage cultural transformations that increase its effectiveness.

It is recommended that the Brazilian Securities and Exchange Commission (CVM) and other regulatory bodies advance in the creation of mechanisms to measure the effectiveness of boards of directors' engagement with the disclosure process. Possible initiatives include: (i) mandatory inclusion of ESG targets in directors' variable compensation structures, to align financial incentives with sustainability and transparency objectives; (ii) development of an effective engagement index, based on the analysis of board minutes and internal documents, to assess the actual level of participation and strategic debate on IR topics; and (iii) implementation of periodic external audits focused on the quality of disclosure, to be conducted, for example, every two years, as a way to ensure substantial adherence to reporting guidelines and avoid mere formal compliance.

A methodological limitation of this study is the lack of inter-rater validation in the content analysis process, as the coding of the integrated reports was performed by a single researcher. Although measures such as pilot analysis, prior training, and a structured protocol were adopted to mitigate subjective biases, the importance of validating coding reliability with statistics such as Cohen's kappa is recognized. Future research could employ statistical variable selection techniques, such as Lasso Regression, to address multicollinearity and improve the predictive robustness of the models. Such improvements would strengthen the internal validity and replicability of the results.

In addition to the limitations of sectoral coverage and the use of secondary data, future studies should consider expanding the analysis with qualitative methods, such as interviews with board members, and applying textual analysis technologies such as Natural Language Processing (NLP). These approaches can capture interpretative nuances and assess more deeply the alignment between the discourse of integrated reports and actual business practices. International comparative research also holds promise for identifying institutional and cultural differences that shape disclosure quality.

For future research, we recommend including variables that more directly capture the mechanisms of institutional isomorphism. For example, for coercive isomorphism, metrics such as the degree of sectoral regulation or oversight intensity could be used. For normative isomorphism, we suggest considering companies' participation in professional associations such as the IBGC or the voluntary adoption of governance certifications. Mimetic isomorphism could be operationalized through the proportion of companies in the same sector that already adopt integrated reporting, capturing the effect of sectoral imitation.

By deepening the analysis of institutional effects on governance and information quality, this study advances the understanding of the limitations of symbolic corporate governance practices in Brazil and offers a framework for future research and more effective regulatory formulations.

References

- Ahmad, N. B. J., Rashid, A., & Gow, J. (2017). Board meeting frequency and corporate social responsibility (CSR) reporting: Evidence from Malaysia. *Corporate Board: role, duties and composition*, 13(1), 87-99. <https://doi.org/10.22495/cbv13i1c1art3>
- Ahmed Haji, A., & Anifowose, M. (2016). The trend of integrated reporting practice in South Africa: ceremonial or substantive? *Sustainability Accounting, Management and Policy Journal*, 7(2), 190-224. <https://doi.org/10.1108/SAMPJ-11-2015-0106>
- Al-Hashimi, Y. N., Al-Sulaiti, K. I., Al-Emadi, A., & Al-Ali, A. (2021). *The impact of corporate governance on firm performance during the COVID-19 pandemic: Evidence from Malaysia*. https://staff.najah.edu/media/published_research/2021/02/12/The_Impact_of_Corporate_Governance_on_Firm_Performance_During_The_COVID-19_Pandemic__Evidence_from_Malaysia.pdf
- AlQudah, M., Rashid, A., & Pervin, S. (2019). The impact of board of directors characteristics on ROE and ROA; an analytical study in non-financial companies. *Journal of Accounting and Financial Studies*.
- Amorim, S. M. S. S., Oliveira, M. C., Ponte, V. M. R., & Abreu, M. C. S. (2017). Pressões institucionais na divulgação ambiental das empresas do BRICS. *Organizações em Contexto*, 13(25), 245-277. <https://doi.org/10.15603/1982-8756/roc.v13n25p245-277>
- Bardin, L. (2004). *Análise de conteúdo*. 3ªed. Lisboa: Edições.
- Barros, A. N. F., Frazão, D. M., Anjos, L. C. M., & Aquino, J. T. (2018) O Impacto do Relato Integrado nas Empresas Participantes do Programa Piloto no Brasil. *Revista de Contabilidade da UFBA*, 12(3). <https://doi.org/10.9771/rc-ufba.v12i3.26696>
- Ben-Amar, W., & McIlkenny, P. (2015). Board effectiveness and the voluntary disclosure of climate change information. *Business Strategy and the Environment*, 24(8), 704-719. <https://doi.org/10.1002/bse.1840>
- Brugni, T. V., Fávero, L. P. L., Klotzle, M. C., & Pinto, A. C. F. (2018). Conselhos de administração brasileiros: uma análise à luz dos formulários de referência. *Advances in Scientific and Applied Accounting*, 146-165. <https://doi.org/10.14392/asaa.2018110108>

- Calado, D. A., Silva, A. P. da, Rodrigues, M. R., & Cavalcante, P. P. (2024). *Relatório Integrado de Gestão: Perspectivas dos Contadores sobre a Efetividade em uma Universidade Pública Brasileira à luz da Teoria Institucional e da Inovação Aberta*. ResearchGate. <https://doi.org/10.5380/rcc.v16i1.90092>
- Chi, C. W., Hung, K., Cheng, H. W., & Lieu, P. T. (2015). Family firms and earnings management in Taiwan: Influence of corporate governance. *International Review of Economics & Finance*, 36, 88-98. <https://doi.org/10.1016/j.iref.2014.11.009>
- Comissão de Valores Mobiliários. (2020). *Resolução CVM n.º 14, de 29 de junho de 2020: Dispõe sobre a divulgação de informações relacionadas à elaboração e divulgação de Relato Integrado*. <https://www.in.gov.br/en/web/dou/-/resolucao-cvm-n-14-de-29-de-junho-de-2020-265688017>
- Conselho Federal de Contabilidade. (2020). *Norma Brasileira de Contabilidade, CTG 09, de 26 de novembro de 2020: Aprova o CTG 09, que trata sobre a correlação à Estrutura Conceitual Básica do Relato Integrado*. <https://www.in.gov.br/web/dou/-/norma-brasileira-de-contabilidade-ctg-09-de-26-de-novembro-de-2020-296458638>
- Cornett, M. M., Marcus, A. J., & Tehranian, H. (2008). Corporate governance and pay-for-performance: The impact of earnings management. *Journal of Financial Economics*, 87(2), 357-373. <https://doi.org/10.1016/j.jfineco.2007.03.003>
- Correia, L. F., & Amaral, H. F. (2009). A eficiência do conselho de administração como mecanismo de controle dos custos de agência. *Anais do Congresso Brasileiro de Custos-ABC*, Fortaleza, Ceará, Brasil, 16.
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147-160. <https://doi.org/10.2307/2095101>
- Fávero, L. P. L., & Belfiore, P. P. (2017). *Manual de análise de dados: estatística e modelagem multivariada com Excel, SPSS e Stata*. Rio de Janeiro: Elsevier.
- Fernandes, R. B. (2020). *Fatores associados à divulgação voluntária do relato integrado* (Master's thesis, Universidade Federal do Rio Grande do Norte).
- Forte, H. C., Silva, L. K. S., & de Abreu, M. C. S. (2021). Efeito da Estrutura do Conselho de Administração na Evidência de Práticas Ambientais e Sociais em empresas brasileiras. *Revista Universo Contábil*, 16(1), 119-135. <https://doi.org/10.4270/ruc.2020106>
- Frias-Aceituno, J. V., Rodríguez-Ariza, L., & Garcia-Sanchez, I. M. (2013). The role of the board in the dissemination of integrated corporate social reporting. *Corporate Social Responsibility and Environmental Management*, 20(4), 219-233. <https://doi.org/10.1002/csr.1294>
- Frias-Aceituno, J. V., Rodríguez-Ariza, L., & García-Sánchez, I. M. (2014). Explanatory factors of integrated sustainability and financial reporting. *Business strategy and the environment*, 23(1), 56-72. <https://doi.org/10.1002/bse.1765>
- Gandía, J. L. (2008). Determinants of internet-based corporate governance disclosure by Spanish listed companies. *Online Information Review*, 32(6), 791-817. <https://doi.org/10.1108/14684520810923944>
- García-Sánchez, I. M., Rodríguez-Ariza, L., & Frías-Aceituno, J. V. (2013). The cultural system and integrated reporting. *International business review*, 22(5), 828-838. <https://doi.org/10.1016/j.ibusrev.2013.01.007>
- Gerwanski, J., Kordsachia, O., & Velte, P. (2019). Determinants of materiality disclosure quality in integrated reporting: Empirical evidence from an international setting. *Business Strategy and the Environment*, 28(5), 750-770. <https://doi.org/10.1002/bse.2278>

- Ghani, E. K., Jamal, J., Puspitasari, E., & Gunardi, A. (2018). Factors influencing integrated reporting practices among Malaysian public listed real property companies: A sustainable development effort. *International Journal of Managerial and Financial Accounting*, 10(2), 144-162. <https://doi.org/10.1504/IJMFA.2018.091662>
- Gul, F. A., Srinidhi, B., & Tsui, J. (2007). *Do female directors enhance corporate board monitoring? Some evidence from earnings quality*. Hong Kong Polytechnic University.
- Gulzar, I., Tabash, M. I., Ahmad, G., Yazdani, W., & Alam, M. F. (2023). Investigating the nexus between corporate governance and firm performance in India: Evidence from COVID-19. *Journal of Risk and Financial Management*, 16(7), 307. <https://doi.org/10.3390/jrfm16070307>
- Harvard Law School Forum on Corporate Governance. (2021). COVID-19 and comparative corporate governance. Retrieved from <https://corpgov.law.harvard.edu>
- Hoque, M. E. (2017). Why company should adopt integrated reporting. *International Journal of Economics and Financial Issues*, 7(1), 241-248.
- Hossain, M., & Hammami, H. (2009). Voluntary disclosure in the annual reports of an emerging country: The case of Qatar. *Advances in Accounting*, 25(2), 255-265. <https://doi.org/10.1016/j.adiaac.2009.08.002>
- Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *The Journal of Finance*, 48(3), 831-880. <https://doi.org/10.1111/j.1540-6261.1993.tb04022.x>
- Kanagaretnam, K., Lobo, G. J., & Whalen, D. J. (2007). Does good corporate governance reduce information asymmetry around quarterly earnings announcements? *Journal of Accounting and Public Policy*, 26(4), 497-522. <https://doi.org/10.1016/j.jaccpubpol.2007.05.003>
- King, M. R., & Santor, E. (2008). Family values: Ownership structure, performance and capital structure of Canadian firms. *Journal of Banking & Finance*, 32(11), 2423-2432.
- Liu, X., & Anbumozhi, V. (2009). Determinant factors of corporate environmental information disclosure: An empirical study of Chinese listed companies. *Journal of Cleaner Production*, 17(6), 593-600. <https://doi.org/10.1016/j.jclepro.2008.10.001>
- Magerakis, E., Gkillas, K., Tsagkanos, A., & Siriopoulos, C. (2020). Firm Size Does Matter: New Evidence on the Determinants of Cash Holdings. *Journal of Risk and Financial Management*, 13(8), 163.
- Mantovani, F. R. Jael, A. Lee, A. Beserra, I & Santos, R. B., (2017) Relato Integrado: Uma Análise da Evidenciação dos Capitais de uma Empresa Brasileira de Grande Porte. *Redeca*, 4(1).
- Maria, S. C., d'Angelo, M. J., & Borgerth, V. M. D. C. (2022). Lacunas de engajamento e utilização do Relato Integrado no Brasil. *Revista Contabilidade & Finanças*, 33, 63-80. <https://doi.org/10.1590/1808-057x202112040>
- Matias-Pereira, J. (2021). Institutional Theory applied to accounting: Evolution and perspectives. *Brazilian Journal of Development*, 7(10), 96651-96699.
- Melloni, G., Stacchezzini, R., & Lai, A. (2016). The tone of business model disclosure: an impression management analysis of the integrated reports. *Journal of Management and Governance*.
- McGuinness, P. B., Vieito, J. P., & Wang, M. (2017). The role of board gender and foreign ownership in the CSR performance of Chinese listed firms. *Journal of Corporate Finance*, 42, 75-99. <https://doi.org/10.1016/j.jcorpfin.2016.11.001>
- Mohammadnezhad, S., Ayazi, S., & Naderian, A. (2024). Institutional isomorphism model and its impact on environmental, social, and corporate governance reporting. *International Journal of Innovation Management and Organizational Behavior*, In Press. <https://doi.org/10.61838/kman.ijimob.5.x.x>

- Nossa, V. (2002) Disclosure ambiental: uma análise do conteúdo dos relatórios ambientais de empresas do setor de papel e celulose em nível internacional. [Tese de Doutorado] em Controladoria e Contabilidade: Contabilidade. Faculdade de Economia, Administração e Contabilidade, Universidade de São Paulo.
- Perlin, M., Kirch, G., Vancin, D., & Mastella, M. (2021). The Impact of Academic Titles of Board Member and Directors Over the Performance of Companies Traded at B3. *Brazilian Business Review*, 18(5), 561–584. <https://doi.org/10.15728/bbr.2021.18.5.5>
- Pistoni, A., Songini, L., & Bavagnoli, F. (2018). Integrated reporting quality: An empirical analysis. *Corporate Social Responsibility and Environmental Management*, 25(4), 489–507. <https://doi.org/10.1002/csr.1474>
- Reis, L. G. dos, & de Moraes, C. M. (2021). Relato Integrado: uma análise comparativa entre empresas brasileiras e europeias sob a ótica da Teoria Institucional. *REUNIR Revista de Administração Contabilidade e Sustentabilidade*, 11(1), 1–15.
- Saks, Y. (2018). The relationship between corporate governance and integrated reporting quality. *Journal of Business Ethics*.
- Silva, S. M. F. (2020). *Relato Integrado: Investigação, Qualidade e Valor da Empresa* (Doctoral dissertation, Instituto Politécnico do Porto. Escola Superior de Tecnologia e Gestão).
- Simona, C., Maria, G. S., & Andrea, V. (2018). Does the market reward integrated report quality? *African Journal of Business Management*, 12(4), 78–91. <https://doi.org/10.5897/AJBM2017.8469>
- Slewinski, E., Camacho, R. R., & Sanches, S. L. R. (2015). Análise Bibliométrica e Paradigmática da Produção Científica sobre Relato Integrado nos Periódicos Internacionais de Contabilidade. *Anais do Congresso USP de Controladoria e Contabilidade*, São Paulo, SP, Brasil, 15.
- Soeiro, F. A. R., & Wanderley, J. L. M. (2019). Teoria institucional: Uma revisão de sua aplicação em estudos de contabilidade. *Organizações & Sociedade*, 26(89), 598–623. <https://www.scielo.br/j/osoc/a/VjQ6SWJ63GVNjVgHdSFvKwK/?format=pdf>
- Vidigal, H., & Felisoni, C. (2025). The role of corporate governance institutes in the development of good practices: Analysis between Brazil and Portugal. *Journal of Sustainable Institutional Management*, 12, e0161, 1–15. <https://doi.org/10.37497/jsim.v12.id161.2025>
- Vitolla, F., Raimo, N., & Rubino, M. (2020). Board characteristics and integrated reporting quality: an agency theory perspective. *Corporate Social Responsibility and Environmental Management*, 27(2), 1152–1163. <https://doi.org/10.1002/csr.1879>
- Vitolla, F., Raimo, N., Rubino, M., & Garzoni, A. (2020). The impact of national culture on integrated reporting quality. *Journal of Management and Governance*.
- Xie, B., Davidson III, W. N., & DaDalt, P. J. (2003). Earnings management and corporate governance: the role of the board and the audit committee. *Journal of Corporate Finance*, 9(3), 295–316. [https://doi.org/10.1016/S0929-1199\(02\)00006-8](https://doi.org/10.1016/S0929-1199(02)00006-8)
- Zaro, E. S. (2021). Relato Integrado e a Divulgação Corporativa para a Sustentabilidade. *Revista Mineira de Contabilidade*, 22(1), 4–11. <https://doi.org/10.51320/rmc.v22i1.132>