

Impairment Test: Compliance Analysis Of Mandatory Disclosure Required By CPC 01 (R1) In Brazilian Companies Listed On B3

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Abstract

This paper aims to analyze the compliance of the mandatory disclosure of impairment test required by Technical Pronouncement CPC 01 (R1) in Brazilian companies listed on B3 SA, from 2011 to 2023, testing factors and characteristics (companies audited by big four, corporate governance, larger companies, indebted companies, and goodwill) to verify whether these factors influence disclosure compliance by sector of the economy. The methodology used data from B3 S.A. and the economical software in 193 companies across 17 economic sectors. Among the factors and characteristics surveyed, the big four, corporate governance, larger companies and goodwill suggest significant influence on compliance with mandatory disclosure, while indebted companies do not. The results also suggest that some sectors of the economy were more likely to comply with the impairment test disclosure. These findings contribute to the ongoing debate on financial disclosure practices in emerging markets, providing valuable insights for regulators, investors, and policymakers.

Keywords: Disclosure; Impairment test; Conformity; Brazilian market.

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I. Introduction

The impairment test is a critical aspect of financial reporting, as it ensures that companies accurately reflect the value of their assets on their balance sheets. Since 2007, the Brazilian Accounting Standards (NBC) have formalized the process of convergence to international accounting standards. These international standards are issued by the International Financial Reporting Standards (IFRS), while in Brazil, the convergence process was regulated by the Accounting Pronouncements Committee (CPC), which is responsible for issuing accounting pronouncements (Cunha & Barros, 2021) known as CPCs.

One of the key pronouncements in this context is CPC 01 (R1) – Impairment of Assets, which deals with the impairment of assets. This pronouncement was validated by regulatory bodies, such as the Brazilian Securities and Exchange Commission (CVM), making it mandatory for publicly traded companies.

In 2010, the committee revised the technical pronouncement and established CPC 01 (R1), which became mandatory for publicly traded companies. The term impairment, in its literal translation, means loss or weakening; however, in accounting, its interpretation refers to the recoverability test, which technically addresses the reduction of the recoverable amount of an asset, whether tangible or intangible (IAS 36 Impairment of Assets, 2023).

Studies on compliance with impairment test disclosures have examined various factors and characteristics. This study considers those factors and characteristics that have shown some influence on disclosure compliance, namely: companies audited by Big Four audit firms, corporate governance, companies with larger asset volumes, companies with higher levels of debt, and goodwill (Meek et al., 2023; Monti et al., 2022; Boateng et al., 2022; Saha & Neogy, 2021; Kim et al., 2021; Korca et al., 2021; Saha & Kabra, 2021).

This study examines literature and legislation to identify the mandatory information companies must disclose regarding the impairment test, as well as the factors and characteristics that may influence disclosure compliance. The study compares researched data from the beginning of the mandatory implementation in 2011 to the last available year, 2023.

Similar international studies have analyzed the early years of impairment test implementation in different countries, such as Australia (Guthrie & Pang, 2013), the United States (Sapkauskienė et al., 2016), and Italy and the United Kingdom (D'Alauro, 2013). This research focuses on the case of Brazil, considering the mandatory disclosure of the impairment test and the compliance of Brazilian companies listed on B3 S.A. became mandatory only in 2011, a few years after its implementation in the aforementioned countries. The findings of this research will allow a comparison of impairment test compliance in Brazil with other countries during their initial years of implementation.

This study serves as an identification tool for stakeholders interested in financial information—including managers, regulators, policymakers, academics, accountants, entrepreneurs, investors, and other internal and external agents—by providing valuable insights into the disclosure of the impairment test. This information can be utilized both to comply with legal requirements and for managerial purposes.

II. Literature Review

Impairment Test and Accounting Standards

The impairment test is a critical accounting procedure that ensures the proper valuation of assets on a company's balance sheet. The primary objective of the impairment test is to ensure that assets are not recorded in financial statements at a value exceeding their recoverable amount. Based on its literal translation, the word impairment means reduction (Sušková & Buchtová, 2021).

Additionally, the updated value, the list of tested assets, the methodology, and the circumstances of the impairment test are legally required to be disclosed. The international standard IAS 36 – Impairment of Assets establishes procedures for assets that have suffered a reduction in their recoverable amount. Accordingly, an asset cannot be reported in financial statements at a value higher than its recoverable amount, whether determined by its value in use or fair value less costs to sell (CPC 01).

Technical Pronouncement CPC 01 (R1) clearly indicates that the application of the impairment test is linked to the use of fair value. Fair value is utilized to determine the exit price of assets and is defined in Technical Pronouncement CPC 46, which addresses fair value measurement as the price that would be received for selling an asset or paid for transferring a liability (Hajiyev, 2021). This valuation method considers factors such as market conditions, asset usage, location, valuation date, and possible restrictions on sale or use.

If one of these values exceeds the asset's carrying amount, no impairment loss is recognized, and therefore, there is no need to estimate another value. However, determining fair value and less costs to sell may not always be feasible due to the absence of a reliable estimate of the selling price. In such cases, value in use can be applied as the recoverable amount.

Mazzioni et al. (2014) states that fair value less costs to sell represents the estimated amount that could be obtained in a future sale transaction, but for the impairment test, selling expenses must be deducted. Value in use is represented by the present value of estimated future cash flows expected to be derived from the asset or a cash-generating unit (CGU). The recoverable amount must be assessed individually for each asset. If this is not feasible, it is essential to determine the recoverable amount of the CGU to which the asset belongs, which depends on appropriate accounting choices.

Accounting choices can influence financial results, enabling earnings management, where managers and accountants, while complying with regulations, may measure or disclose accounting data in a way that benefits the company. Additionally, earnings management can occur through accounting choices that directly impact decision-making, particularly in the measurement of assets (Majid & Ali, 2023).

The impairment test, when applied to goodwill, has a negative impact on a company's financial results, leading to a highly unfavorable reaction from external investors. Research on high-premium mergers and acquisitions, along with the impairment of significant goodwill, holds great importance, as mergers carry the inherent risk of impairment due to the underperformance of the target company (Huo & Zhang, 2021).

Disclosure Requirements for the Impairment Test

The preparation and disclosure of financial statements involve accounting decisions and choices that are legally recognized and regulated by accepted accounting standards. This occurs because, in many cases, companies have options regarding recognition, measurement, and disclosure (Paugam & Ramond, 2014)

Accounting disclosure, or disclosure, is the practice of disseminating information produced based on an organization's activities. Among the different forms of disclosure, the Notes to the Financial Statements serve to complement the Financial Statements (Flood, 2021). Technical Pronouncement CPC 01 (R1), items 126 to 133, defines the mandatory information that must be disclosed in financial statements and explanatory notes regarding the impairment test. Among the required disclosures, companies must, at a minimum, disclose the following items:

- The amount of the impairment loss (or its reversal), including recognized devaluations during the period and any effects on revaluation reserves.
- The list of items comprises the cash-generating unit and a description of the rationale behind its composition.
- If the recoverable amount is fair value less costs to sell, the basis used to determine this value must be disclosed (for instance, whether fair value was determined based on an active market).
- If the recoverable amount is value in use, an explanation of the discount rate applied must be disclosed.
- The events and circumstances that led to the recognition or reversal of the impairment loss.

The Federal Accounting Council (CFC) issued its own act, establishing the mandatory execution of the impairment test, with items 9 and 10 regulated by CPC 01 (R1). At the end of each fiscal year, companies must

assess whether there is any indication that an asset has suffered impairment; if so, the company must perform the impairment test.

Factors and Characteristics

The studies previously cited in this research (Pop et al., 2023; Monti et al., 2022; Boateng et al., 2022; Bellandi, 2021; Gilson et al., 2023; Caskey et al., 2021; Johl et al., 2021; Dharmasiri et al., 2021; De Souza et al., 2015; Mazzioni et al., 2014; Petersen & Plenborg, 2010; Sapkauskiene et al., 2016; De Moura et al., 2014; Santos et al., 2014) have identified factors and characteristics that may influence the compliance of impairment test disclosure, such as:

Companies audited by Big Four

Auditing firms tend to have better compliance with the disclosure requirements (Monti et al., 2022), Palmer (2008) e Petersen and Plenborg (2010). Monti et al. (2022) has analyzed the relationship between company characteristics and the level and disclosure of CSR. We add to the understanding of the importance of these characteristics for CSR by providing evidence on the CSR-risk link.

Palmer (2008) found that companies audited by Big Four firms exhibited better disclosure under IFRS. Petersen and Plenborg (2010) revealed that inconsistencies are less likely in companies audited by Big Four firms. Frost et al. (2008), drawing on extensive experience in valuation, argue that Big Four auditors are more demanding, leading to greater compliance with accounting disclosure standards. Based on these findings, the following hypothesis is proposed:

H1: Companies audited by a Big Four firm exhibit greater compliance with impairment test disclosure.

Companies with some level of corporate governance

Corporate governance is a system involving the relationship between shareholders, boards of directors, oversight bodies, management, and other stakeholders of a company. The objective is to foster closer relationships with investors, suppliers, customers, and all stakeholders, ensuring transparency, disclosure, and compliance policies. It is expected that companies adhering to any level of corporate governance (Level 1, Level 2, or Novo Mercado) will exhibit higher compliance with impairment test disclosure requirements than companies not subject to corporate governance regulations (Boateng et al., 2022) Mazzioni et al. (2014).

Boateng et al. (2022) states that corporate governance attributes of board size and board leadership structure are significant determinants of the extent of voluntary disclosures made by Africa firms. Mazzioni et al. (2014) confirmed that companies with some level of corporate governance tend to be more transparent in their impairment test disclosure. This finding leads to the formulation of the following hypothesis:

H2: Companies that adhere to any level of corporate governance exhibit greater compliance with impairment test disclosure.

Larger companies in terms of total assets (size)

Larger companies have greater resources to invest in their departments, maintaining a higher level of internal organization. Consequently, it is estimated that they have better compliance with impairment test disclosure requirements compared to smaller companies (Setyawati, 2022). For this study, "larger companies" were defined as those with higher asset volumes.

According to Depoers (2000), larger companies tend to have more structured accounting departments. Mazzioni et al. (2014) concluded that company size was a significant variable in the level of impairment test disclosure. Similarly, De Souza et al. (2015) demonstrated that larger companies tend to exhibit greater compliance with CPC 01 impairment test disclosure requirements. However, given the divergent findings in previous studies, the following hypothesis is proposed:

H3: Larger companies, in terms of total assets, exhibit greater compliance with impairment test disclosure.

Indebted companies (Leverage)

Companies with higher levels of debt tend to disclose more financial information to satisfy creditors (Mazzioni et al., 2014). For this study, the general debt ratio was calculated as the ratio of total liabilities to total assets (Sá, Nascimento, Silva, & Borges, 2015). It is expected that more indebted companies will exhibit higher compliance with impairment test disclosure requirements compared to less indebted companies (Gilson et al., 2023; Caskey et al., 2021).

Petersen and Plenborg (2010) found that highly leveraged companies demonstrate higher compliance with impairment test disclosure compared to companies audited by smaller audit firms. De Souza et al. (2015) also concluded that more indebted companies tend to comply better with CPC 01 impairment test disclosure requirements.

Given the divergent findings regarding the influence of company debt on impairment test disclosure, the following hypothesis is proposed:

H4: Companies with higher levels of general indebtedness exhibit greater compliance with impairment test disclosure.

Goodwill

The impairment test applied to goodwill negatively affects a company's financial results, triggering a decline in stock prices (Wen, 2023; Killins et al., 2021; Huo & Zhang, 2021; Aquino et al., 2011; Escaffre & Sefsaf, 2010). For this study, goodwill recognition was determined based on whether an amount was recorded under intangible assets in the goodwill account.

Despite the negative financial impact of goodwill impairment, Sapkauskiene et al. (2016) found that companies tend to delay goodwill impairment tests until more favorable circumstances arise. Based on the findings presented in prior research, the following hypothesis is proposed:

H5: Companies that recognize goodwill exhibit greater compliance with impairment test disclosure.

III. Methodology

This study used data from publicly traded non-financial companies, as financial sector firms have specific characteristics that complicate comparisons with other industries. In particular, financial assets are subject to additional technical pronouncements, such as CPC 18, CPC 36, and CPC 38. The sample includes companies with shares traded on the Brasil, Bolsa, Balcão (B3) stock exchange that were required to disclose the impairment test following the issuance of Technical Pronouncement CPC 01 (R1) in 2010 and the publication of CVM Instruction No. 485.

The study covers the period from 2011 to 2023, starting with 2011 as the first full year of mandatory impairment test disclosure and extending to 2023, which was the last year for which data was collected.

Database

This study adopts a quantitative and descriptive approach based on secondary data collected from the B3 stock exchange website and the Economática® software, with data processing performed in STATA. The dataset comprises 1,592 observations from 193 companies across 17 economic sectors, including food and beverages, retail, construction, electronics, electricity, industrial machinery, mining, non-metallic minerals, paper and pulp, oil and gas, chemicals, steel and metallurgy, software and data, telecommunications, vehicles and auto parts, transportation and services, and textiles.

The study examines the influence of firm-specific factors and characteristics on compliance with the disclosure requirements of Technical Pronouncement CPC 01 (R1). The factors and characteristics analyzed include:

- Audit by a Big Four firm (PricewaterhouseCoopers, Deloitte Touche Tohmatsu, KPMG, and Ernst & Young)
- Corporate governance level (Level 1, Level 2, or Novo Mercado)
- Company size, measured as the natural logarithm of total assets
- Leverage, measured as the ratio of total liabilities to total assets
- Goodwill recognition, based on whether goodwill was recorded as an intangible asset

These factors were analyzed by the economic sector. According to Technical Pronouncement CPC 01 (R1), items 126 to 133, companies are required to disclose in their financial statements and explanatory notes the following impairment test-related information:

- The amount of impairment loss or its reversal
- The list of assets comprising the cash-generating unit (CGU)
- The fair value less costs to sell or value in use
- The events and circumstances that led to impairment recognition or reversal

Econometric Model and Variables

To address the research questions and test the previously formulated hypotheses, the study estimates multiple regression models, which seek to relate different types of disclosure to specific firm characteristics while controlling other variables in the study.

$$div_{jit} = \beta_0 + \beta_1 big4_{it} + \beta_2 endividamento_{it} + \beta_3 size_{it} + \beta_4 gov_{it} + \beta_5 goodwill_{it} + \varepsilon_{it} \quad j = 1, 2, 3, 4$$

The index *j* adjusts the equation depending on the specific disclosure dummy used as the dependent variable (1. value, 2. items, 3. base, and 4. events). Thus, the model is applied to *div1*, *div2*, *div3*, and *div4* as the explained variables.

The indices *i* and *t* represent, respectively, the company and time period for each observation. The one-way fixed effect model is utilized, which assumes that the characteristics of each company that do not vary over time have a constant effect on the dependent variable, but this effect differs between companies.

To examine whether disclosure (dependent variable) is influenced by the independent variables, dummy variables were created to represent disclosure compliance in relation to the impairment test. These variables were constructed as follows:

Figure 1: Independent Variables of the Regression Model

Variable	Type	Description
Big4	Dummy	1 if company i was audited by a Big Four firm in period t, 0 otherwise
Leverage	Ratio	Ratio of total liabilities to total assets of company i in period t
Size	Ln	Natural logarithm of total assets of company i in period t
Governance	Dummy	1 if company i in period t is in the highest governance levels (Level 1, Level 2, or Novo Mercado), 0 otherwise
Goodwill	Dummy	1 if company i in period t recorded goodwill as an asset, 0 otherwise

Estimators, Tests, and Statistical Treatment

Since the dependent variables are dummy variables, it is not appropriate to use a linear estimator such as Ordinary Least Squares (OLS). Instead, the study employs a logit estimator, which ensures that the estimated probability of disclosure compliance remains within the range of 0 to 1. This is necessary because the estimation seeks to determine the effect of an independent variable on the probability of impairment test disclosure compliance.

For the two continuous variables (leverage and size), winsorization was applied at the 1% level to minimize the impact of outliers on the study. Additionally, the model includes control variables for the economic sector, as these factors may influence the relationship between the studied variables.

An additional test was conducted to validate the model: the multicollinearity test. For each model estimated via logit, the same model was estimated using OLS to calculate the Variance Inflation Factor (VIF). According to Wooldridge (2016), a VIF above 5 indicates a significant degree of collinearity among the independent variables, which could substantially affect the hypothesis tests related to the significance of the model’s coefficients.

IV. Results And Discussion

In this section, the results of the present study are presented. Table 1 provides the main descriptive statistics of the study variables, aiming to characterize the sample used in the research. Based on the data, it is possible to affirm that more than half of the companies analyzed during the studied years had a value of 1 for the variable div1. This result indicates that most companies disclosed the impairment loss value.

However, this number is not as expressive when considering div2, as only 29% of the sample disclosed the list of items that compose the cash-generating unit (CGU), while almost 33% disclosed the basis used (fair value less costs to sell or value in use), measured by div3. Finally, only 15% reported the events and circumstances that led to recognition, represented by div4.

Although more than half of the companies performed the impairment test and disclosed its value (as indicated by the div1 mean above 0.55, representing 55%), the vast majority did not fully comply with the other mandatory disclosure requirements, as the means of div2, div3, and div4 are all below 0.5.

Table 1: Descriptive Statistics

Variable	N	Mean	S.d.	Min.	1q	Med	3q	Max
Div1	1,592	0.554	0.531	0	0	1	1	1
Div2	1,592	0.291	0.470	0	0	0	1	1
Div3	1,592	0.326	0.487	0	0	0	1	1
Div4	1,592	0.151	0.357	0	0	0	0	1
Big4	1,592	0.627	0.522	0	0	1	1	1
Leverage	1,592	0.922	1.510	0.040	0.489	0.650	0.809	12.301
Size	1,592	14.421	2.361	6.074	13.171	14.801	15.971	19.001
Governance	1,592	0.523	0.531	0	0	0	1	1
Goodwill	1,592	0.118	0.313	0	0	0	0	1

Table 2 presents the results of the regression model estimates. Panel A shows the estimates for the models without control variables, while Panel B presents the estimates with control variables. It can be observed that the VIF values reported below the coefficients are all lower than 5 in every case. This result indicates that the estimation and statistical inference regarding the hypothesis tests for the coefficients are not compromised or biased by multicollinearity issues.

In Panel A, the first column shows that, except for leverage, all other coefficients are statistically significant in explaining div1. Among the significant variables, except for the Big Four dummy, all coefficients have a positive sign. This result suggests that larger companies are more likely to report impairment losses

when undergoing an impairment recognition process. The same holds true for companies with higher levels of corporate governance and those reporting goodwill. Regarding the Big Four dummy, it can be inferred that companies audited by a Big Four firm have a lower probability of disclosing impairment losses.

In the second column, which presents the results for the models where div2 is the dependent variable, only the Big Four dummy is not statistically significant, while all other variables are statistically significant with positive coefficients. This means that larger firms, those with higher levels of leverage, those reporting goodwill, and those in higher corporate governance levels (Level 1, Level 2, and Novo Mercado) are more likely to disclose the components of the cash-generating unit related to impairment losses.

Regarding div3, the same variables that were significant in explaining the impairment loss disclosure dummy are also significant in this case. The coefficient signs remain the same, except for the Big Four dummy, which now also presents a positive coefficient. These results indicate that larger companies, those reporting goodwill, those audited by a Big Four firm, and those with high levels of corporate governance are more likely to disclose information about the valuation basis.

For div4, all variables are statistically significant with positive coefficients, except for the Big Four dummy, which has a negative coefficient. This suggests that larger companies, those with higher levels of leverage, those reporting goodwill, and those with the highest levels of corporate governance—but not audited by a Big Four firm—are more likely to disclose the events leading to the impairment loss.

In Panel B, the estimates are re-evaluated, incorporating controls for industry. The significance levels of the main variables and the estimated coefficients remain consistent with those found in the models without these controls. This result suggests a certain degree of robustness in the findings, as the coefficients remain consistently significant and maintain the same direction of association regardless of whether industry controls are applied.

Table 2: Results of the regression model estimates

Panel A: Models Uncontrolled for Sector								
Variable	Dependent Variable							
	div1		div2		div3		div4	
Big4	-0.377	***	0.186		0.292	**	-0.363	*
Leverage	0.022		0.202	***	0.084		0.267	
Size	0.289	***	0.398	***	0.392	***	0.432	***
Governance	0.797	***	0.859	***	0.831	***	0.675	***
Goodwill	0.424	***	0.876	***	0.562	***	1.078	***
Constant	-4.288	***	-7.861	***	-7.489	***	-9.058	***
R ²	0.107		0.158		0.160		0.131	
Observations	1,592		1,592		1,592		1,592	
Panel B: Models Controlled for Sector								
Variable	Dependent Variable							
	div1		div2		div3		div4	
Big4	-0.439	***	0.196		0.250	*	-0.562	***
Leverage	-0.012		0.212	***	0.074		0.335	***
Size	0.374	***	0.461	***	0.424	***	0.540	***
Governance	0.879	***	1.054	***	0.978	***	0.807	***
Goodwill	0.269		0.727	***	0.454	**	1.279	***
Food and Beverages	-0.526		1.578		-0.217		0.665	
Commerce	0.352		2.180		0.283		1.864	*
Construction	-1.217	***	0.116		-1.472	***	-1.366	
Electronics	0.415		0.073		0.410		0.000	
Electric Energy	-1.201	***	0.839		-0.529		0.719	
Non-Metallic Minerals	-2.010	***	0.345		-1.520	***	1.329	
Mining	0.427		2.451	***	0.377		2.557	**
Industrial Machinery	-0.065		1.495	*	-0.475		0.000	
Pulp and Paper	0.036		-0.029		-0.589		0.908	
Oil and Gas	0.264		1.248	*	-0.149		1.826	*
Chemicals	0.344		1.988	***	0.773	*	2.594	**
Steel and Metallurgy	-0.067		2.116	***	0.280		1.470	
Software and Data	-0.540		0.450		-0.593		-0.702	
Telecommunications	-0.536		1.022		0.169		0.000	
Textiles	-0.039		2.296	***	-0.013		2.143	*
Transport and Services	-0.496		1.809	***	-0.246		0.790	
Vehicles	1.464	***	1.972	***	0.170		1.824	*
Constant	-5.634	***	-10.815	***	-7.927	***	-12.189	***
R ²	0.194		0.233		0.200		0.226	
Observations	1,592		1,592		1,592		1,592	

About the hypothesis H1, the regression results indicate that companies audited by a Big Four firm tend to exhibit lower compliance with impairment test disclosure regarding the recognition of impairment losses (div1) and the disclosure of events and circumstances leading to impairment losses (div4), as shown by the statistically significant negative coefficients in both models.

However, for the disclosure of the valuation basis (div3), the coefficient is positive and significant, suggesting that the Big Four audited firms are more likely to disclose valuation details. The lack of significance in div2 suggests that the presence of a Big Four auditors does not strongly influence the disclosure of cash-generating unit (CGU) components. These findings challenge the initial hypothesis, indicating that while Big Four auditors may enhance compliance with certain aspects of impairment disclosure, they do not necessarily improve full compliance across all disclosure requirements.

Regarding hypothesis H2, the results strongly support this hypothesis, as corporate governance exhibits statistically significant and positive coefficients across all dependent variables (div1, div2, div3, and div4). This indicates that companies with higher governance standards (Level 1, Level 2, or Novo Mercado) are more likely to comply with impairment test disclosure requirements, aligning with expectations that corporate governance mechanisms enhance transparency. This result reinforces previous literature, which suggests that corporate governance frameworks foster better financial reporting practices and more comprehensive disclosure. (Paugam & Ramond, 2014).

In relation to the hypothesis H3, company size is positively and significantly associated with all four disclosure variables (div1, div2, div3, and div4), with highly significant coefficients in both models. This confirms that larger companies are more likely to comply with impairment test disclosure requirements, supporting the hypothesis. Larger firms typically have more structured accounting departments, greater regulatory scrutiny, and more resources to ensure compliance, which may explain these results. The increasing significance of size in models with sector controls further strengthens this conclusion.

Regarding hypotheses H4, the results for leverage present mixed evidence regarding this hypothesis. The coefficient for leverage is positive and significant for div2 and div4, indicating that more indebted companies are more likely to disclose the components of CGUs and the events leading to impairment losses.

However, leverage does not exhibit significance in div1 (impairment loss value disclosure) or div3 (valuation basis disclosure), suggesting that the effect of debt on disclosure is not uniform. These findings suggest that leverage influences only specific aspects of impairment test disclosure rather than overall compliance.

And the hypothesis H5, the results provide strong support for this hypothesis, as the goodwill variable shows statistically significant and positive coefficients for div2, div3, and div4, indicating that companies reporting goodwill are more likely to disclose CGU components, valuation bases, and impairment loss events.

However, the coefficient for div1 is not significant in the model with sector controls, suggesting that goodwill does not necessarily increase the likelihood of disclosing the impairment loss itself. Nevertheless, these findings confirm that companies with goodwill are more engaged in impairment-related disclosure, likely due to the increased scrutiny and impact of goodwill impairments on financial statements.

V. Conclusion

This study aimed to assess the compliance with mandatory disclosure requirements of the impairment test and analyze whether factors such as audits by Big Four firms, corporate governance, company size, leverage, and goodwill influence this compliance, comparing them by economic sector.

The statistical results suggest that more than half of the companies analyzed disclosed the impairment loss value. However, disclosure rates for the valuation basis, CGU components, and events leading to impairment loss were only 26%, 30%, and 12%, respectively. This indicates that, while most companies performed the impairment test and disclosed its value, they did not fully comply with the other mandatory disclosure items. These findings are consistent with both national and international literature, which show that Brazilian companies also fail to fully meet disclosure requirements and do not provide all mandatory information.

Regarding firm-specific factors and characteristics, the results indicate that larger companies, those audited by Big Four firms, those with some level of corporate governance, and those with goodwill recorded as an intangible asset are more likely to comply with mandatory disclosure requirements. These findings support the assertions of Petersen & Plenborg (2010), Mazzioni et al. (2014), De Souza et al. (2015), and Santos et al. (2014) regarding Big Four audits, and De Souza et al. (2015) regarding corporate governance. However, the results contradict Mazzioni et al. (2014) and Santos et al. (2014) concerning company size and governance compliance.

Finally, this study aims to contribute to the ongoing discussion on this topic, as the existing literature presents inconsistent findings. Providing further insights may help identify additional factors and characteristics influencing compliance with impairment test disclosure requirements. The study offers valuable information for

stakeholders, managers, accountants, investors, researchers, and students, contributing to both national and international literature by identifying which economic sectors is more likely to comply with disclosure regulations and which firm-specific factors influence compliance. Additionally, this study provides a comparative analysis of the first twelve years of mandatory impairment test disclosure in Brazil.

Future research is encouraged to explore other variables that may contribute to improving full compliance with disclosure requirements in a more appropriate and legally compliant manner.

References

- [1] Aquino, C., Rensel, A., Rensel, C., & Lee, T. (2011). The Impact Of Goodwill On Stock Volatility. *Journal Of International Finance And Economics*, 11, 31-37.
- [2] Bellandi, F. (2021). IFRS 9 Single Impairment Model: Semantics And Circularity? A Study In The Airline Industry. In *International Journal Of Business And Management* (Vol. 16, Issue 12, P. 41). Canadian Center Of Science And Education. <https://doi.org/10.5539/ijbm.v16n12p41>
- [3] Boateng, R. N., Tawiah, V., & Tackie, G. (2022). Corporate Governance And Voluntary Disclosures In Annual Reports: A Post-International Financial Reporting Standard Adoption Evidence From An Emerging Capital Market. In *International Journal Of Accounting And Information Management* (Vol. 30, Issue 2, P. 252). Emerald Publishing Limited. <https://doi.org/10.1108/ijaim-10-2021-0220>
- [4] Caskey, J., Huang, K., & Saavedra, D. (2021). Noncompliance With SEC Regulations: Evidence From Timely Loan Disclosures. In *Review Of Accounting Studies* (Vol. 28, Issue 1, P. 126). Springer Science+Business Media. <https://doi.org/10.1007/S11142-021-09638-0>
- [5] Cunha, C. M. P. Da, & Barros, P. P. F. B. (2021). The Effect On The LTD Of IFRS Adoption And The End Of The Transitional Tax Regime (RTT) In Brazil. In *Revista Contabilidade & Finanças* (Vol. 33, Issue 88, P. 96). University Of São Paulo. <https://doi.org/10.1590/1808-057x202113980>
- [6] D'Alauro, G. (2013). The Impact Of IAS 36 On Goodwill Disclosure: Evidence Of The Write-Offs And Performance Effects. *Intangible Capital*, 9(3), 754-799.
- [7] De Moura, G. D., Varela, P. S., & Beuren, I. M. (2014). Conformidade Do Disclosure Obrigatório Dos Ativos Intangíveis E Práticas De Governança Corporativa. *Revista De Administração Mackenzie*, 15(5).
- [8] De Souza, M. M., Borba, J. A., Wuerges, A. F. E., & Lunkes, R. J. (2015). Perda No Valor Recuperável De Ativos: Fatores Explicativos Do Nível De Evidenciação Das Empresas De Capital Aberto Brasileiras. *Revista Universo Contábil*, 11(2), 6-24.
- [9] Dharmasiri, P., Phang, S., Prasad, A., & Webster, J. (2021). Consequences Of Ethical And Audit Violations: Evidence From The PCAOB Settled Disciplinary Orders. In *Journal Of Business Ethics* (Vol. 179, Issue 1, P. 179). Springer Science+Business Media. <https://doi.org/10.1007/S10551-021-04786-4>
- [10] Escaffre, L., & Sefsaf, R. (2010). French Market Reaction To The Announcement Of Goodwill Impairment. Working Paper, University Of Angers.
- [11] Flood, J. M. (2021). ASC 105 Generally Accepted Accounting Principles (P. 1). <https://doi.org/10.1002/9781119736202.Ch1>
- [12] Gilson, S. C., John, K., & Lang, L. H. P. (2023). Troubled Debt Restructurings: An Empirical Study Of Private Reorganization Of Firms In Default. <https://www.sciencedirect.com/science/article/abs/pii/S0304405X90900599>
- [13] Guthrie, J., & Pang, T. T. (2013). Disclosure Of Goodwill Impairment Under AASB 136 From 2005–2010. *Australian Accounting Review*, 23(3), 216-231.
- [14] Hajjiyev, H. (2021). Accounting And Tax Accounting For The Accrual Of Depreciation Of Fixed Assets And Ways Of Convergence. In *SHS Web Of Conferences* (Vol. 92, P. 2020). EDP Sciences. <https://doi.org/10.1051/shsconf/20219202020>
- [15] Huo, X., & Zhang, G. (2021). An Analysis Of The Economic Consequences Of Listed Companies' Goodwill Impairment. In *Proceedings Of The 6th Annual International Conference On Social Science And Contemporary Humanity Development (SSCHD 2020)*. <https://doi.org/10.2991/assehr.k.210121.116>
- [16] IAS 36 Impairment Of Assets. (2023). <https://www.cpdbox.com/ifrs/ias-36/>
- [17] Johl, S., Mutakin, M. B., Mihret, D. G., Cheung, S., & Giffre, N. (2021). Audit Firm Transparency Disclosures And Audit Quality. In *International Journal Of Auditing* (Vol. 25, Issue 2, P. 508). Wiley. <https://doi.org/10.1111/ijau.12230>
- [18] Killins, R. N., Ngo, T., & Wang, H. (2021). Goodwill Impairment And CEO Overconfidence. In *Journal Of Behavioral And Experimental Finance* (Vol. 29, P. 100459). Elsevier BV. <https://doi.org/10.1016/j.jbef.2021.100459>
- [19] Kim, J. M., Taylor, D. J., & Verrecchia, R. E. (2021). Voluntary Disclosure When Private Information And Disclosure Costs Are Jointly Determined. In *Review Of Accounting Studies* (Vol. 26, Issue 3, P. 971). Springer Science+Business Media. <https://doi.org/10.1007/S11142-021-09601-Z>
- [20] Korca, B., Costa, E., & Farneti, F. (2021). From Voluntary To Mandatory Non-Financial Disclosure Following Directive 2014/95/EU: An Italian Case Study. In *Accounting In Europe* (Vol. 18, Issue 3, P. 353). Routledge. <https://doi.org/10.1080/17449480.2021.1933113>
- [21] Majid, A. S. A., & Ali, S. M. (2023). Creative Accounting: An Overview Of Its Practices Where Are We Heading Now? In *International Journal Of Academic Research In Accounting Finance And Management Sciences* (Vol. 13, Issue 2). <https://doi.org/10.6007/ijarafms/V13-I2/16356>
- [22] Mazzioni, S., Politelo, L., Moreira, W. J., & Klann, R. C. (2014). Fatores Determinantes Na Evidenciação Da Redução Ao Valor Recuperável De Ativos (Impairment Test) Em Empresas Listadas Na BM&Fbovespa. *Revista Base (Administração E Contabilidade)*, 11(4), 276-291.
- [23] Meek, G. K., Roberts, C. B., & Gray, S. J. (2023). Factors Influencing Voluntary Annual Report Disclosures. <https://link.springer.com/article/10.1057/palgrave.jibs.8490186>
- [24] Monti, A., Pattitoni, P., Petracchi, B., & Randl, O. (2022). Does Corporate Social Responsibility Impact Equity Risk? International Evidence. In *Review Of Quantitative Finance And Accounting* (Vol. 59, Issue 3, P. 825). Springer Science+Business Media. <https://doi.org/10.1007/S11156-022-01059-7>
- [25] Paugam, L., & Ramond, O. (2014). Effect Of Impairment Testing Disclosures On The Cost Of Equity Capital. In *Journal Of Business Finance & Accounting* (Vol. 42, P. 583). Wiley. <https://doi.org/10.1111/jbfa.12113>
- [26] Petersen, C., & Plenborg, T. (2010). How Do Firms Implement Impairment Tests Of Goodwill? *Abacus*, 46(4), 419-446.

- [27] Pop, L., Kotlyar, D., & Rossi, I. M. (2023). Asset And Interest Disclosure: A Technical Guide To An Effective Form. In Washington, DC: World Bank Ebooks. <https://doi.org/10.1596/39943>
- [28] Saha, R., & Kabra, K. C. (2021). Is Voluntary Disclosure Value Relevant? Evidence From Top Listed Firms In India. In *Vision The Journal Of Business Perspective* (Vol. 26, Issue 4, P. 471). SAGE Publishing. <https://doi.org/10.1177/0972262920986293>
- [29] Saha, S., & Neogy, T. K. (2021). The Relationship Between Bank Specific Characteristics And The Extent Of Disclosure: Evidence From The Banking Sector In Bangladesh. In *ABC Journal Of Advanced Research* (Vol. 10, Issue 2, P. 89). <https://doi.org/10.18034/abcjar.V10i2.589>
- [30] Sá, T. S., Nascimento, D. V. R., Silva, J. P., & Borges, T. J. G. (2015). Impactos Do Impairment Test Nas Variáveis Contábeis E Nos Indicadores De Desempenho Das 50 Maiores Companhias Listadas Na BM&FBOVESPA. *Revista Contabilidade E Controladoria*, 7(2).
- [31] Santos, E. S., Ponte, V. M. R., & Mapurunga, P. V. R. (2014). Adoção Obrigatória Do IFRS No Brasil (2010): Índice De Conformidade Das Empresas Com A Divulgação Requerida E Alguns Fatores Explicativos. *Revista Contabilidade & Finanças - USP*, 25(65), 161-176.
- [32] Sapkauskiene, A., Leitoniene, S., & Vainiusiene, E. (2016). Disclosure Of Goodwill Impairment In The Baltic States. *Inzinerine Ekonomika*, 417-429.
- [33] Setyawati, I. (2022). The Impact Analysis Of Debt To Equity Ratio (DER) And Company Size On Total Assets Of Banking Companies On The IDX In 2015 – 2019. In *Economit Journal Scientific Journal Of Accountancy Management And Finance* (Vol. 2, Issue 1, P. 54). <https://doi.org/10.33258/Economit.V2i1.611>
- [34] Sušková, A., & Buchtová, J. (2021). Issues Related To Definition Of An Appropriate Depreciation Method For The Purposes Of Calculation In A Metallurgical Company. In *Metal ...* (Vol. 2021, P. 1415). <https://doi.org/10.37904/Metal.2021.4275>
- [35] Technical Pronouncement CPC 01 (R1), October 7, 2010. Impairment Of Assets. Retrieved From <http://www.cpc.org.br/CPC/Documentosemitidos/Pronunciamentos/Pronunciamento>
- [36] Technical Pronouncement CPC 18 (R2), December 8, 2010. Investment In Associates, Subsidiaries, And Joint Ventures. Retrieved From <http://www.cpc.org.br/CPC/Documentosemitidos/Pronunciamentos/Pronunciamento>
- [37] Technical Pronouncement CPC 36 (R3), December 8, 2010. Consolidated Financial Statements. Retrieved From <http://www.cpc.org.br/CPC/Documentosemitidos/Pronunciamentos/Pronunciamento>
- [38] Technical Pronouncement CPC 38, June 26, 2009. Financial Instruments: Recognition And Measurement. Retrieved From <http://www.cpc.org.br/CPC/Documentosemitidos/Pronunciamentos/Pronunciamento>
- [39] Wen, Y. (2023). Goodwill Impairment, M&A, And Industry Development. <https://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0290442&type=printable>