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LEVEL OF DISCLOSURE OF ENVIRONMENTAL PROVISIONS AND CONTINGENT LIABILITIES: ANALYSIS OF COMPANIES WITH HIGH POLLUTION POTENTIAL

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ABSTRACT

Disclosure allows accounting to achieve its main objective, that of providing useful and reliable information to its users. Thus, based on the Theory of Disclosure, this study aims to identify the level of disclosure of provisions and environmental contingent liabilities of companies with high potential for pollution. For this, descriptive research with a qualitative approach was carried out, applying the content analysis technique in the financial statements between the years 2010 and 2019. For data collection, a checklist prepared according to the established criteria was used. by the Accounting Pronouncements Committee No. 25 (CPC 25) for the recognition and disclosure of provisions and contingent liabilities of an environmental nature. The findings reveal a low disclosure of the established items, despite the growing number of affirmative observations in the last three years. As for the level of disclosure, the results showed that the most prominent segment was the extraction and treatment of minerals, with a percentage of 73% in the group of companies listed on the ISE. Regarding the analysis of the groups, the average of the companies listed and not listed on the Corporate Sustainability Index (ISE) was calculated, showing through the Student's T test the existence of a statistically significant difference between the averages, of 27.66

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and 15 ,21, respectively, accepting and rejecting the research null hypothesis. However, the need for other analysis methods was identified to confirm whether the companies included in the ISE have a higher level of disclosure.

Keywords: Provisions. Contingent liabilities. Disclosure. ISE.

1 INTRODUCTION

Accounting is the field of knowledge necessary to subsidize decision making, aiming to generate useful, relevant and accurate information in a timely manner (Dalmácio & Paulo, 2004; Iudícibus, Martins & Carvalho, 2005). The data obtained by the accounting are transformed into reports and later disclosed, in order to highlight the economic and financial situation of the entity (Dalmácio & Paulo, 2004).

According to the Accounting Pronouncements Committee (CPC) 00 of 2011, which presents the conceptual framework for the elaboration and disclosure of accounting-financial report, the objective of these reports is to provide information about the entity, being these presented to external users in general with different purposes and diverse needs.

The causes of environmental degradation, according to Rodrigues, Cunha, Brito and Pires (2016), have been widely explained. Some authors (Masron & Subramaniam, 2019; Rai, 2019; Akinlo & Dada, 2021) correlate degradation with poverty, while others (Isik, Ongan & Özdemir, 2019; Wang & Dong, 2019; Muhammad et.al, 2021) point economic growth as the main determinant. Having said that, Sousa, Sousa and Santos (2016) state that economic growth was considered for a long time as a negative factor, considering the view that it is the cause of environmental impacts, due to the resources for creating goods always come from the wear of nature.

Thus, the ambition for economic growth caused humanity not to watch over the conservation of the environment, harming the health of the population (Pott & Estrela, 2017). Given the environmental impacts, according to Costa and Marion (2007) the market and society began to charge companies with greater environmental responsibility, making the entities seek to take action in order to minimize the exacerbated exploitation of natural sources.

With the intention of increasing the level of market confidence and attracting new investors, some companies began to disclose additional information about social and environmental responsibility actions(Vaz, Gonçalves, Niyama & Gonçalves, 2010). In this perspective, Brasil, Bolsa e Balcão (B3), with the support of other institutions, sought to meet the market requirements by creating the Corporate Sustainability Index (ISE), a performance analysis tool under the aspect of corporate sustainability, making a correlation among the companies listed in B3. Based on economic efficiency, environmental balance, corporate governance and social justice, the objective was to stimulate the ethical responsibility of corporations (Brasil, Bolsa e Balcão, 2019).

However, different from the accounting statements, sustainability reports are voluntary, that is, their disclosure is not mandatory, and the entities are responsible for the decision to prepare them (Pereira & Lucena, 2018). According to Meek, Roberts and Gray (1995), such information of free choice is known as voluntary disclosure, which is of paramount importance due to the need of investors to obtain relevant information about the entities of interest. In order to meet these needs, some entities decide to disclose them (Silva, Slewinski, Sanches & Moraes, 2015).

In the academic context, several works developed nationally addressed *the issue of disclosure* (Murcia & Santos, 2009; Kronbauer & Silva, 2012; Cunha & Ribeiro, 2016; Gangemi, Pereira & Slavov 2016; Costa, Correia, Machado & Lucena, 2017; Silva, Araújo & Santos, 2018; Nascimento & Arruda, 2019), as well as international research (Akhtaruddin, Hossain, Hossain, & Yao, 2009; Abdo, Mangena, Needham, & Hunt, 2018; Abdullah, Hamzah, Helmi, Tseng &

Brander, 2019). With different themes about disclosure, some relate to the level of disclosure of companies listed on the stock exchange, others with the inclusion of companies in the ISE and others related to environmental responsibility.

Considering the importance of environmental disclosure, especially of contingent provisions and liabilities, in order to provide the various users with relevant information, the present study intends to elucidate the following problem: **what is the level of *disclosure* of contingent environmental provisions and liabilities of companies with high pollution potential?** Before that, the objective consists of identifying the level of *disclosure* of contingent environmental provisions and liabilities of companies with high pollution potential.

In this context, the justification for this study is based on the relevance of highlighting the level of *disclosure* of the provisions and contingent environmental liabilities of companies with high pollution potential, since the growth of demands of society regarding the detailing of environmental information, in which, they are influenced by the recognition and disclosure exercised by each company, such choices may impact the analysis of the information and, consequently, the decision making of the stakeholders.

2 THEORETICAL FRAMEWORK

2.1 Disclosure Theory

The Theory of Disclosure is studied by Verrecchia (2001), who through mathematical models tries to explain and predict the phenomena related to *disclosure*. According to the author, this theory does not have a central reference, allowing disclosure to be understood as a diversified and highly stylized mixture in which each model intends to examine a small part. On the other hand, Dye (2001) states that the theory of voluntary disclosure is a similar and special case to the theory of games, since it has the premise that any entity will disclose only favorable information, leaving aside unfavorable information about the company.

According to Verrecchia (2001), the theory of dissemination can be divided into three stages. The first, known as "association-based disclosure", is research that studies the effects of exogenous disclosure on aggregate or cumulative change in investor shares, in which some claim that the quality of information increases voluntary disclosure. The second concerns "discretionary disclosure", which examines how managers exercise self-control in relation to the disclosure of information of their knowledge. The third is related to "efficiency-based disclosure", a study that discusses which agreements are used in the dissemination of information without prior knowledge of them, that is, what are the unconditional choices of disclosure.

Mandatory information is that regulated by different bodies, determined by law. The voluntary ones are those that are independent of legal imposition, such as those related to environmental liabilities, which allow to highlight the position of the entity in relation to environmental risks, corporate governance and its commitment to sustainable development (Malacrida & Yamamoto, 2006; Kronbauer & Silva, 2012). The objective of voluntary disclosure is to explain the phenomenon that occurs when disclosing financial information in different perspectives, trying to explain the reasons that lead the entity to voluntarily disclose certain information (Lewis, Walls, & Dowell, 2013).

Thus, the voluntary information is disclosed from the moment that its contribution to the entity, taking into account the costs of this disclosure, is higher than the value that it would have in the case of non-disclosure, thus, the same states that, theoretically, the absence of disclosure costs causes *full disclosure* . However, as such costs increase, the level of disclosure tends to decrease (Verrecchia, 2001). The disclosure of both voluntary and compulsory information becomes an aid instrument for reducing disagreement in understanding the information provided and the information received (Silva et al., 2015).

The managers, although they have knowledge of certain information, may decide not to show them, in order to hide the real situation of the entity (Murcia & Wuerges, 2011). As Verrecchia (2001) states, by not disclosing certain information, the market may interpret in a rational way that information is inadequate.

Therefore, voluntary disclosure does not provide the investor with the guarantee of maximization of economic return. However, objective, clear and complete disclosure helps increase the reliability of information, being these fundamental to users in the decision-making process (Yang & Battocchio, 2021).

2.2 Contingent environmental provisions and liabilities

Environmental impacts can generate economic and financial losses, therefore they must be calculated and evidenced by means of environmental provisions and liabilities, which are divided into third party capital and equity. Thus, companies that do not recognize potential environmental obligations will earn unreal profits (Antonovz, 2014).

According to Bertoli and Ribeiro (2006), environmental information has become important, in order to allow clear and objective evidence of the position that the entity has in face of environmental risks. When such companies decide not to highlight this information, the maintenance of their information becomes compromised, because their users will not have subsidies for a correct situational assessment of the entity, and it is not possible to correctly judge the viability of the entity in which they will invest (Bertoli & Ribeiro, 2006).

Regarding the entities, Gomes and Garcia (2013) affirm that the aspects of social responsibility are still fragmented and centralized, therefore, have a perception that social responsibility is a function and not an organizational vision. However, due to increased environmental awareness and fierce competition, the costs of controlling and measuring environmental spending are overcome by the benefits. Therefore, it is notorious that the entities are more connected with environmental strategies, in order to transform sustainability into a business opportunity (Gomes & Garcia, 2013).

The Accounting Pronouncements Committee (CPC) 25 of 2009 is responsible for establishing criteria for the recognition and measurement of contingent provisions and liabilities, that conceptualize the provisions as a liability of term and uncertain value and contingent liability as a possible obligation that is the result of past events and whose existence will be confirmed by the occurrence or not of unknown future events or liabilities that are not liable to be recognized (CPC, 2009). Likewise, the International Accounting Standard (IAS) 37 deals with contingent provisions and liabilities, providing criteria to ensure that sufficient information is disclosed for effective understanding. Both claim that provisions are liabilities of uncertain perspective, while contingent liabilities are possible obligations, not entirely on entity control (IAS 37, 2018).

As mentioned above and according to the Manual of Corporate Accounting of Gelbcke, Santos, Iudícibus e Martins (2018), certain accounting treatment should be applied in the situations presented in Table 1, taking into account the measurement of the obligation and the main observations.

Table 1
Accounting treatment applied to contingent provisions and liabilities

Probability of occurrence	Measurement	Treatment	Note
Likely	Measured by reliable estimate	A provision should be recognized and disclosed in explanatory notes	Where there is more likely to be an obligation present and has met the criteria for recognition
	Non measurable by reliable estimate	To disclose in explanatory notes	-

Likely	N/A	It does not recognize a provision, but the contingent liability must be disclosed in the explanatory notes	Where it is more likely that there is no present obligation
Remote	N/A	N/A	No occurrence is recognized or disclosed

Note. N/A (Not applicable)
Source: Adapted from Gelbcke et al. (2018).

According to International Accounting Standard (IAS) 37, past events that have led to a present obligation are easily identified in most cases. However, there are situations where the occurrence of certain events is debatable, so the entity will use the available evidence to determine whether the present obligation actually exists.

On the basis of such evidence the entity must recognize a provision when it is more likely than when there is no present obligation, this if such obligations meet the recognition criteria. However, where it is likely that there is no such obligation, that is, there is only one possibility, a contingent liability should be disclosed, except in cases where the possibility of efflux of resources incorporating economic benefits is remote (IAS 37, 2018).

2.3 Previous Studies

The research associated with *disclosure level* usually relates to items of voluntary disclosure of companies seeking to evidence information that will serve as support for users of accounting information. Thus, the present study sought to relate in this topic research that identifies with this theme, especially those that address the environmental issue as an item of disclosure.

At the national level, Cunha and Ribeiro (2016) investigated how the advance of accounting standards impacted the disclosure of contingent provisions and liabilities, in this sense, a content analysis was carried out in 468 explanatory notes, released from 1997 to 2014, by 26 companies in the electricity sector. The results showed that only 53.85% of the sample showed environmental liabilities at least once during this period. However, it was found a significant increase in disclosure from 2006, with the approval of the Accounting Standard and Procedure 22, issued by Ibracon.

Gangemi, Pereira and Slavov (2016) investigated the accounting practices in relation to the provisions and contingent liabilities in sugar-alcohol companies, by analyzing the financial statements of 17 large companies in the segment in the state of São Paulo, including open and closed companies, between the years 2011 and 2015. The results showed low levels of adherence to CPC 25, besides identifying that there was no improvement in accounting practices during the years analyzed, that is, the perceived learning curve in other studies cannot be proven.

Costa et al. (2017) analyzed the differences between contingent liabilities of companies listed on BM&FBovespa in Brazil and Australia's ASX. For this, a literature review was carried out that addressed *disclosure* and contingent liabilities. The sample comprised the period from 2010 to 2015, with data collected from the financial statements on the categories that represent the contingency characteristics. As a result, it was identified that, in Brazil, the predominant contingent liability category is the tax, which corresponds to 56% of the total contingent liabilities evidenced by Brazilian companies. Whereas in Australia, it is the guarantees, which correspond almost to all the contingencies verified, i.e. 98%.

Silva, Araújo and Santos (2018) evaluated the relationship between profitability and the level of disclosure of contingent environmental provisions and liabilities of companies with high potential polluter listed in B3. To this end, 38 companies were analyzed, from 2011 to 2016. The results showed a negative statistical relationship between profitability and the level of

environmental disclosure, demonstrating that more profitable companies are not necessarily the ones that most disclose information related to environmental contingent provisions and liabilities.

Nascimento and Arruda (2019) analyzed the level of disclosure of contingent liabilities of banks listed in the differentiated segments of corporate governance of BM&FBovespa in the financial statements from 2014 to 2016, which consisted of a qualitative research, classified as descriptive. It was found that, of the ten companies analyzed, six presented the level above the average and four were below and that the contingent liabilities most found were tax, labor and civil, respectively.

From an international point of view, studies such as that of Abdo et al. (2018) examined the degree of compliance with accounting disclosure requirements for oil and gas companies' costs and investigated the views of stakeholders on the practices of these companies, using a content analysis approach. The results revealed that compliance is substantially high, but companies tend to accept a check box that only provides for minimum disclosure requirements. In semi-structured interviews, we identified that disclosure decisions were motivated by concerns about the credibility of information due to complexities in accounting processes, regulatory requirements, lack of information demand and proprietary costs.

In this context, according to the objective of the research and assuming that companies with high pollution potential listed in the ISE present greater awareness about social responsibility and corporate sustainability, the following hypothesis was formulated:

H1: Companies with high pollution potential listed in the Corporate Sustainability Index (ISE) have a higher level of *disclosure* of environmental contingent provisions and liabilities.

3 METHODOLOGICAL PROCEDURES

This study aimed at identifying the level of *disclosure* of contingent environmental provisions and liabilities of companies with high pollution potential. For this, it is characterized as descriptive, as to the objective, which, according to Raupp and Beuren (2006), portrays the aspects and behaviors, and is therefore important to clarify certain characteristics about the data studied. Setting up as a middle ground between exploratory research and explanatory research (Raupp & Beuren, 2006).

As for the research approach, it is classified as qualitative and technical procedure delimited by documentary analysis, which Raupp and Beuren (2006) claim to organize information that is dispersed, guaranteeing them a new relevance as a source of research. Through this procedure the analysis will be performed of the information contained in the Standardized Financial Statements (DFPs), whose data collected were organized and worked through the Excel spreadsheet version 13.

Therefore, the sample of the research was formed by publicly traded companies, who have their shares negotiated in B3 and that are within the related sectors in Law No. 10.165/2000, which provides on the National Policy of the Environment and classifies in its Annex VIII, in three levels (high, medium and low), potentially polluting activities and users of environmental resources. This classification is due to the potential pollution risk (PP) that an economic activity offers to the environment, in addition to the Degree of Use (GU) that shows the level of exploitation of natural resources according to a certain economic activity (Ferreira, Rover, Ferreira & Borba, 2016).

Currently, according to the Brasil, Bolsa e Balcão (B3) (2019) website (2019), more than 350 companies have their shares negotiated in B3, however, due to the relevance of environmental information of companies that have a higher pollution potential and in order to delimit the sample to be researched, Only companies classified with high potential were considered, as evidenced in Table 2. Thus, the survey sample consists of 37 (thirty-seven) companies, of which only 9 (nine) belonged to the ISE portfolio between the years 2010 and 2019.

The time frame from 2010 to 2019 was determined seeking to identify the levels of disclosure after the approval of CPC 25 by the Brazilian Securities and Exchange Commission (CVM) Resolution No. 594/2009, which approved such a statement and made it mandatory for publicly-held companies to apply from the financial year ended 2010. In order to analyze the information disclosed in the Standardized Financial Statements (DFPs) issued by the companies, a content analysis was performed. According to Bardin (2011), this methodological technique numerically analyzes the frequency of occurrence of certain terms of a text.

Table 2
Number of companies classified with high pollution potential and listed on ISE

Category according to Law no. 10.165/2000	Category according to B3	NOT listed in ISE	Listed in ISE
Extraction and treatment of minerals	Metal Minerals	4	1
Metallurgical Industry	Steel industry	2	3
	Iron and Steel artifacts.	3	0
	Copper Artifacts	1	0
Paper and Pulp Industry	Paper and Pulp	3	3
Chemical Industry	Petrochemicals	2	1
	Fertilizers and Pesticides	2	0
	Various Chemicals	2	0
Transport, Terminals, Deposits and Trade	Exploration, Refining and Distribution.	7	1
	Equipment and Services	2	0
Total		**28**	**9**

Source: Adapted from Santos (2016).

Thus, *a check list* was prepared according to the disclosure criteria for provisions and contingent liabilities extracted from CPC 25. *The check list* is an inspection technique that does not require specialized evaluator, only the knowledge about the tool to be used, and therefore able to identify through a checklist large number of general and repetitive problems (Sales & Cybis, 2003). As evidenced in Table 3, *the check list* presents two alternative options, "Yes" and "No". Thus, when analyzing the DFPs, it will be observed if the companies show such information, assigning the affirmative alternatives the value of "1" and for each negative response, the value of "0".

Table 3
Disclosure items of environmental contingent provisions and liabilities according to CPC 25 (*checklist*)

Provisions	**Yes**	**No**
1. Do they disclose provisions with accounting value at the beginning and end of the period?	1	0
2. Do they disclose the amounts of unused provisions during the period?	1	0
3. Do they disclose a brief description of the nature of obligation?	1	0
4. Do they disclose the indication of uncertainty about value?	1	0
Contingent Liabilities.		
1. Do they disclose a brief description of the nature of the contingent liability?	1	0
2. Do they disclose the estimate of their financial effect?	1	0
3. Do they disclose the indication of uncertainty about value or moment of occurrence of exit?	1	0
4. Do they disclose the possibility of any disbursement?	1	0

Source: Elaborated by the author, 2019.

Therefore, the maximum possible score to be obtained for each company is 8 (eight), where such score will be used for the calculation of the simple arithmetic mean. According to Cazorla

(2003), the arithmetic mean can be understood as the sum of the values divided by the number of observations involved in the sum.

Identifying the corresponding number of statements observed per company, the arithmetic mean of the years under analysis was performed. Based on these values, *the Student's T test* sought to identify if there is a significant difference between the means, allowing the rejection or not of the null hypothesis and, consequently, the acceptance of the alternative hypothesis, showing whether there is a relationship between *the disclosure level* and the Corporate Sustainability Index.

4 RESULTS AND DISCUSSIONS

4.1 Quality of information

In order to analyze the quality of the information provided, the recognition criteria and measurement and disclosure bases established by CPC 25 were used, using the checklist technique to facilitate the analysis of the data evidenced in the DFP's and to verify the percentage of companies observing such criteria for disclosure of provisions and contingent liabilities.

Table 4
Percentage by disclosure criteria – Provisions

Provisions	Percentage of companies that disclose (%)									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
1. Do they disclose provisions with accounting value at the beginning and end of the period?	43%	38%	41%	49%	43%	46%	49%	51%	54%	68%
2. Do they disclose the amounts of unused provisions during the period?	11%	14%	16%	19%	19%	19%	24%	27%	30%	43%
3. Do they disclose a brief description of the nature of obligation?	43%	38%	41%	49%	43%	46%	49%	51%	54%	68%
4. Do they disclose the indication of uncertainty about value?	11%	11%	11%	11%	8%	11%	14%	14%	14%	24%

Source: Elaborated by the authors based on the research data (2020).

Of the items related to the provisions, the accounting value at the beginning and end of the period stood out (item 1) and the brief description of the nature of the operation (item 3), which between the years 2010 to 2019 showed a minimum percentage of 38%. Followed by disclosure of unused values during the period (item 2) with at least 11% and indication of uncertainties about the amounts to be disbursed (item 4) with at least 8%, corroborating with the findings of Gangemi, Pereira and Slavov (2016), that investigated 17 large companies in the sugar-alcohol segment of the state of São Paulo.

In the first and third items, the observations were similar, because as the companies showed the values at the beginning and end of the period, the nature (environmental) was also evidenced, however, some companies disclosed only summary table of these values, while others detailed the cause of the provisioning by process. The second item, despite insufficient disclosure, when evidenced, detailed in the table the initial balance, additions, reversals, payments, monetary update and final balance of the provisioned values, enabling better analysis and comparability of the information.

Table 5
Percentage by disclosure criteria – Provisions

Contingent Liabilities.	Percentage of companies that disclose (%)									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
1. Do they disclose a brief description of the nature of the contingent liability?	19%	22%	22%	27%	19%	22%	22%	22%	22%	35%
2. Do they disclose the estimate of their financial effect?	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
3. Do they disclose the indication of uncertainty about value or moment of occurrence of exit?	8%	8%	8%	8%	5%	3%	5%	5%	5%	5%
4. Do they disclose the possibility of any disbursement?	16%	19%	22%	24%	19%	19%	22%	22%	24%	35%

Source: Elaborated by the authors based on the research data (2020).

Regarding the contingent liabilities, the items about brief description of nature (item 1) and the possibility of any disbursement (item 4) stood out with the minimum percentage of 19% and 16%, respectively. Followed of indication of uncertainty about value or moment of occurrence of exit (item 3) with minimum 3%. The estimate item on the financial effect (item 2) did not show any evidence.

4.2 Disclosure level per segment

In order to know the level of disclosure, the percentage of the alternatives in relation to the maximum possible score (8) was identified for each year analyzed. From this result, the average of the years 2010 to 2019 of the group of companies belonging to each specific segment was calculated, separating the groups between those listed and not listed in the ISE, as shown in Table 6.

Table 6
Disclosure level per segment

Category according to Law no. 10.165/2000	NOT listed on ISE			Listed in ISE		
	Total affirmative	%	Level	Total affirmative	%	Level
Extraction and treatment of minerals	54	13%	17%	58	23%	73%
Metallurgical Industry	71	17%	15%	93	37%	39%
Paper and Pulp Industry	12	3%	5%	36	14%	15%
Chemical Industry	123	29%	26%	33	13%	41%
Transport, Terminals, Deposits and Trade	166	39%	23%	29	12%	36%
Total of Notes	**426**	**100%**		**249**	**100%**	

Source: Elaborated by the authors based on the research data (2020).

Of the 5 segments evidenced by Law no. 10.165/2000, the segment of transport, terminals, deposits and commerce stood out in the group of companies not listed in the ISE, with 166 affirmative observations on the disclosure of provisions and contingent environmental liabilities, accounting for a percentage of 39% of the total observations. Regarding the group of companies

listed in ISE, the segment that stood out was the metallurgical industry with 93 affirmative observations.

Regarding *the level of disclosure*, the segment with the greatest prominence were those of the Chemical Industry (26% and 41%) and the extraction and treatment of minerals (17% and 73%). This percentage differs from the values evidenced in the affirmative observations, because the calculation for the level of disclosure takes into account, in addition to the affirmative values, the number of companies belonging to the group, using the average per year analyzed to identify the percentage by segment.

Of the 37 companies, it was possible to identify through the analysis, that 29 showed some of the items mentioned in the research, this in the environmental field. However, if we were to analyze the other segments (tax, civil and labor), the numbers obtained would be, in the majority, differentiated, because practically all companies show about these other segments. In addition, some entities mentioned within civil processes the values related to the environmental part, however, only the values that had mention of the real nature of the process were considered.

Therefore, it is necessary to mention the possible subjectivity of the analysis, as there is no standardization of the accounts and/or information disclosed, the collection of these is compromised. It is also worth mentioning that the company Litela started trading its shares in B3 only in 2018, as well as the companies Dommo in 2013, and PetrobrasBR in 2016.

4.3. Groups Analysis

In order to analyze the relationship among the groups of companies listed and not listed in the ISE, descriptive statistics were used to describe the relevant attributes in particular. Therefore, it was evidenced the number of companies and the total affirmative observations by group, in addition to the values of mean, variance and standard deviation.

Table 7
Descriptive Statistics

	Listed in ISE	Not listed in ISE
Number of companies	9	28
Affirmative remarks	249	426
Average	27.67	15.21
Variance	225.50	265.06
Standard Deviation	15.02	20.00
Maximum	58	59
Minimum	7	0

Source: Elaborated by the authors based on the research data (2020).

The maximum and minimum values evidenced correspond to the amount of statements obtained per company, according to the sum of the years, set out in Appendix B of this research. Of the companies listed in the ISE, Vale presented maximum disclosure value (58) of those not listed in the ISE, Petrobras with 59 statements. According to Carvalho, Santos and Ferreira (2020), the company's biggest concern in highlighting and measuring its reports with reliability may be related to police operations against corruption, such as Lava Jato, which implicated severe penalties for the company, which has caused the company to be subject to the same conditions. in need of greater commitment of the company when preparing its statements according to what is preestablished.

Despite the obvious distinction among the means, it is necessary to use statistical tests in order to verify the existence of a significant difference among the values. Therefore, *the student t test* was performed with the help of the data analysis tool of the Excel 2013 package.

Table 8
Student's T-test calculation

Groups	N	Average	*T*	p-value
Not listed in ISE	28	15.21	2.0310	0.0249*
Listed in ISE	9	27.66		

Source: Elaborated by the authors based on the research data (2020).
*Single flow rate, statistically significant at 5%.

The p-value was calculated using Student's T-test, defined as the probability that measures the intensity of the evidence against the null hypothesis. To reject the null hypothesis, it is necessary that the value is lower than the significance level (α=0.05 or 5%). Rejecting the null hypothesis means that the data presented were sufficient to demonstrate the falsity of the hypothesis, otherwise, other means of verification should be used to identify the falsity or not of the null hypothesis.

4.4 Results Discussion

Given the results obtained in this study, it is possible to observe the low evidence of the items established by CPC 25, where the majority remained with a percentage of observations below 50%. However, it can be observed that there has been an increase in the number of evidences, especially in the last three years.

One of the main reasons, according to Silva, Araújo and Santos (2018), is the non-obligation of other environmental information, however, it is necessary to understand that the criteria of recognition, measurement and disclosure should be followed, in order to highlight reliable information about financial statements, allowing this information to be disclosed with quality and ability to favor understanding to stakeholders.

In view of this, the question arises whether the information, especially on contingent liabilities, does not exist or whether the companies, by caution, decided not to disclose, thus hindering the assessment of the risks by the stakeholders and the identification of the real commitment of the company to the environmental part, corroborating with Weiduschath and Rover (2017) who concluded that most companies do not adequately evidence environmental information.

It is worth noting that the non-disclosure of contingent environmental provisions and liabilities does not mean the lack of commitment to the environment. Some companies have environmental expenses that are not configured as contingency provisions or liabilities, but expenses of the period.

Finally, in order to investigate the research hypothesis, *a Student's T test was performed*, which presented a p-value of 0.0249 (one-tailed), which was lower than the level of significance (5%). According to the results, there is a significant difference between the averages presented indicating that the companies listed in the ISE have a higher level of *disclosure* of environmental provisions and liabilities, corroborating with the theory of disclosure, which states, according to Burgwal and Vieira (2014), that companies that have good environmental performance tend to disclose more information about their impacts on the environment. In view of the above, the null hypothesis is rejected.

As evidenced in the results, it is possible to observe that there is still a great need for companies to seek greater standardization and integration of their financial reports to established standards, allowing the information elaborated by the accounting to reach its main objective, to provide relevant and reliable information for decision making. In addition, with the pursuit of

society for greater accountability of companies with the environment, it is necessary to provide information that guarantees transparency and their commitment to social responsibility.

5 FINAL CONSIDERATIONS

This study aimed at analyzing the level of *disclosure* of contingent environmental provisions and liabilities of companies with high pollution potential. In addition to seeking the existence of the positive relationship between the composition of these companies in the ISE portfolio and *the level of disclosure*. The sample of the research was composed based on Law no. 10.165/2000, which provides on the National Policy of the Environment and classifies companies by potential pollution. Of the 350 companies listed in B3, only 37 (thirty-seven) are included in this high-potential classification and of these, only 09 (nine) belonged to ISE in the years 2010 to 2019.

From the financial statements observed, it was possible to identify that companies show contingent provisions and liabilities of the various segments, however, in order to verify if the companies are committed to social responsibility and corporate sustainability, the analysis was focused only on those of an environmental nature, seeking to correlate *the level of disclosure* with the Corporate Sustainability Index and identify if this relationship contributes to a higher level of disclosure.

The results indicate that the companies belonging to the ISE portfolio showed an average of 27.66 of the information on provisions and contingent liabilities of an environmental nature, while the others showed only an average of 15.21. Therefore, it was identified the significant difference between the means through *student's T-test*, allowing the rejection of the null hypothesis, indicating that there is a positive relationship between the Index and the level of transparency, corroborating with the theory of disclosure, that predicts that companies with good environmental performance do not suppress the dissemination of information to stakeholders about their operational activities that generate an impact on the environment (Burgwal & Vieira, 2014). In addition, it was found that, despite the increasing levels of disclosure during the years observed, a significant amount of companies analyzed presents an average in *the level of disclosure* less than 50%, showing a fragility in the quality of the information provided.

Moreover, the contribution that this research proposed was the evidence of the positive relationship between *the disclosure level* and the Corporate Sustainability Index, demonstrating that the incentive to sustainable organizational development, reinforced by this tool of B3, in fact contributes efficiently to the results, in order to differentiate in terms of quality, level of commitment, equity, transparency and accountability. As a limitation of the present study, the subjectivity of content analysis of items of CPC 25 is highlighted, in which it was noted difficulty identifying the items listed in the CPC, being necessary the standardization of financial statements. It is recommended for future research the use of other parameters of analysis, highlighting environmental information, not only of the provisions and contingent liabilities, but of the other data that allow to identify in a concrete way the company's commitment to social responsibility and corporate sustainability.

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