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Effect of Corporate Governance on the Quality of Risk Disclosure Statement

ABSTRACT

Objective: To analyze the effect of corporate governance on the quality of risk disclosure in companies in the non-cyclical consumer sector, listed on B3.
Method: 28 companies from the non-cyclical consumer sector, listed in B3, are part of the study sample. Descriptive statistics, DP2 technique and multiple linear regression were used for data analysis.
Originality/Relevance: This study differs from the others by involving a set of corporate governance variables and relating them to the quality of the risk disclosure, which includes the content that is disclosed.
Results: It has been shown that, the larger the size of the Board of Directors, the better the quality of the risk disclosure tends to be.
Theoretical/Methodological contributions: This research contributes to the accounting area by indicating that the Board of Directors performs its role related to the evidenced information on risks and that the number of members contributes to the perception of risks.

Keywords: Corporate Governance. Quality. Risk Disclosure

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1 INTRODUCTION

Corporate governance is a determining factor in compliance with disclosure (Ettredge, Johnstone, Stone & Wang, 2011) and ensures that managers act in the best interest of shareholders, in addition to encouraging the disclosure of important information about the organization (Siagian, Siregar, & Rahadian , 2013). Corporate governance focuses on greater transparency, and disclosure, so that stakeholders have relevant information (Khiari, 2013; Mallin, 2002).

Taylor, Tower and Neilson (2010) indicate that companies with strong corporate governance mechanisms are more involved in the disclosure of corporate risks. According to the Brazilian Institute of Corporate Governance (IBGC, 2017), effective risk management occurs through the corporate governance structure, additionally, according to Yatim (2010), the concept of risk management has become central and is associated internal control of the organization.

Risk management aims to reduce the likelihood of financial failure and maximize the company's profitability, thus disclosing information related to risk represents an important part of corporate governance (Amran, Bin, & Hassan, 2008; Solomon, Solomon, Norton, & Joseph, 2000), since information users analyze it for decision making and if there is a relationship between risk disclosure and corporate governance, the governance structure will facilitate investment decisions (Solomon et al., 2000). According to Inácio-Soares and Marcon (2019, p. 252), corporate governance can be understood as "the way in which investors guarantee a return on their investment". In this way, a corporate governance framework contributes to investors' perceptions about the disclosure of corporate risk (Solomon et al., 2000).

The risk disclosure should include information on the main risks to which the company is exposed and the expected economic impact, which includes information on the sources of uncertainty, actions taken to face the risks and prospective information on risk management (Miihkinen, 2012). In the analysis of risk disclosure, attention should be paid not only to what is disclosed, but also how it is disclosed, as the amount of disclosure has no relation to the quality of disclosure, the latter being more important (Abraham & Shrives, 2014; Beretta & Bozzolan, 2004; 2008), which justifies the present study.

However, there is little evidence in the literature as to the quality of the risk disclosure (Beretta & Bozzolan, 2004; Miihkinen, 2012); as studies generally analyze the amount of information disclosed, although there is a section of the literature dedicated to examining the quality of disclosure. (Abraham & Shrives, 2014). The quality of disclosure refers to the content that is disclosed (risk factors, measures to disclose impacts, management) (Beretta & Bozzolan, 2004). To be successful with risk management, these need to be identified and measured (Chen & Lee, 2013). Companies with greater exposure to risks tend to have more information about risks (Miihkinen, 2012).

Given the fact that corporate governance contributes to the disclosure of risks and that the quality of disclosure is more important than quantity, the following research question was elaborated: What is the effect of corporate governance on the quality of disclosure of risks? In view of this issue, the study aims to analyze the effect of corporate governance on the quality of risk disclosure in companies in the non-cyclical consumer sector, listed in B3.

Several studies involving corporate governance and information disclosure have been developed using different variables to measure corporate governance, such as duality as CEO and chairman of the Board of Directors (Al-Janadi, Omar, & Rahman, 2012; Haniffa & Cooke, 2002), size of the Board of Directors (Al-Janadi et al., 2012), independent members (Al-Janadi et al., 2012; Al-Maghzom, Hussainey, & Aly, 2016), active boards and financial knowledge (Ettredge et al. 2011), audit committee (Al-Maghzom et al., 2016; Ettredge et al., 2011), audits performed by Big Four companies (Al-Janadi et al., 2012; Ettredge et al., 2011), risk committee (Subramaniam, Mcmanus, & Zhang, 2009; Yatim, 2010). This study differs from the others by involving a set of corporate governance variables and relating them to the quality of risk disclosure, which includes the content disclosed.

According to Cabedo Semper e Tirado Beltrán (2009) and Carmona, Fuentes and Ruiz (2016) the quality of the risk disclosure includes the risks to which the company is exposed, the description of the risks and how they affect the company, the information of quantitative measure of impact of the risk, information on risk management and types of risk mitigation, as well as instruments used.

In turn, attention to companies in the non-cyclical consumer sector is due to their diversity, which includes, according to the classification of [B] 3, the segments of agriculture, sugar and alcohol, various foods, meat and meat products, beers and soft drinks, food, cleaning products and personal use products, totaling 32 companies.

The quality of the risk disclosure, which goes beyond just mentioning the risks to which the company is exposed, becomes relevant for the administrators and for the interested parties, as it allows the administrators to better understand the context of the company and the parties Interested parties can use the information for decision making regarding negotiations, partnerships, investments. According to Antonelli, Portulhak, Scherer and Clemente (2018), disclosure of information reduces risk perception. Thus, companies that present higher quality of disclosure, tend to transmit greater security to users of information. In the theoretical field, the study's contribution lies in understanding the relationship between corporate governance mechanisms and information about risks. Methodologically, the study contributes by verifying the risks evidenced in five stages, according to Cabedo Semper and Tirado Beltrán (2009) and Carmona, Fuentes and Ruiz (2016) and by forming a ranking, using the DP2 method.

2 THEORETICAL FRAMEWORK

The theoretical framework begins with a brief presentation on corporate governance. Then, the quality of the risk disclosure is discussed and then the relationship between corporate governance and the quality of the risk disclosure.

Corporate governance is defined by the IBGC (2017, p. 22) as “the system by which companies and other organizations are managed, monitored and encouraged, involving the relationships between partners, board of directors, executive officers, supervisory and control bodies and other interested parties ”. It can also be seen as a set of mechanisms that aim to monitor the management, the performance of organizations (Nascimento & Reginato, 2008) and align the organization's objectives with the interests of shareholders (Nascimento & Reginato, 2008; Shleifer & Vishny, 1997; Silveira, 2004), transmitting security regarding the correct handling of resources (Nascimento & Reginato, 2008).

The Organization for Economic Cooperation and Development (OECD, 2007), highlights that corporate governance must ensure that information relevant to society is disclosed, such as information on financial and operating results, company objectives, information on the members of the management body , risk factors, among others.

Institutions that defend transparency consider that the Board of Directors with independent members, independent auditing and mechanisms to protect shareholders are fundamental requirements for adequate corporate governance (Nascimento & Reginato, 2008). Okimura (2003) classifies the mechanisms of corporate governance as internal and external; the internal mechanisms include the board of directors, remuneration policies, ownership structure and financing structure, while the external mechanisms comprise the legal, political and regulatory environment, the capital market and mergers and acquisitions, the competitive market of the insurance sector performance.

Silveira (2004) addresses the following governance mechanisms: Board of Directors, ownership and control structure, remuneration policy, capital structure, competition in the product market, competition in the managers' labor market, existence of a labor market, hostile acquisitions and the publication of regular reports, among others.

The governance structure contributes to effective risk management, through the perception of risks through the quality of the business environment, processes, controls and technologies employed, which also underpins decision-making (IBGC, 2017). Studies on disclosure of corporate risks, focused on the quantification of risks, are focusing on their quality (Mousa & Elamir, 2014).

2.1 Quality of Risk Disclosure

In this topic, before dealing with the quality of risk disclosure, it is necessary to expose the main concepts related to risk and types of risk. To identify the disclosure of risks, it is necessary to define what is risk (Linsley & Shrives, 2006). The events that occur can affect both negatively and positively the company, those that negatively impact represent risks and those that positively impact may represent opportunities or contribute to balance those with negative impact (COSO, 2004).

The risk refers to the possibility of “something not going right”, involving the quantification and qualification of uncertainty (IBGC, 2017, p. 11). The possibility of an event occurring that negatively influences the achievement of organizational objectives is characterized as risk (COSO, 2004), which would become any danger, damage, threat or exposure that has already influenced the company or may affect it in the future (Linsley & Shrives, 2006).

Risk is an element related to any organizational activity (Amran, Bin, & Hassan, 2008; IBGC, 2017). In addition to financial risk, the company is subject to business risks or economic changes, and it is in the interest of users of the information that these are disclosed in a timely manner, thus risk management has become important in corporate governance (Amran et al., 2008).

Risk management is composed of processes that aim to identify and respond to events that may affect organizational objectives and a corporate governance structure, which is responsible for monitoring the functioning of this process (IBGC, 2017). It refers to methods and processes used to manage risks (Amran et al., 2008). The Board of Directors, executive officers and other employees, conducts corporate risk management, applied in the establishment of strategies. Its purpose is to identify events that may affect the organization, as well as to manage them, so that the company reaches its objectives (COSO, 2004). In addition, the effectiveness of risk management can influence the organization's strategic and statutory objectives (IBGC, 2017).

Having defined what risk and its management process are, Figure 1 shows the risk categories and their respective types of risks.

Categories	Types of risks
Financial Risks	
Financial Risks	Exchange rate, credit, liquidity, commodities and interest rate exposures.
Non-Financial Risks	
Operational Risks	Customer satisfaction, product development, efficiency and performance, stock obsolescence and shrinkage, product and service failure, environment, health and safety, brand name erosion.
Empowerment Risks	Leadership and management, outsourcing, performance incentives, changing readiness, communications.
Information Processing and Technology Risks	Integrity, access, availability, infrastructure.
Integrity Risks	Management and employee fraud, illegal acts, reputation.
Strategic Risks	Environmental scan/analysis, industry, business portfolio, competitors, pricing, valuation, planning, life cycle, performance measurement, regulatory, sovereign and political.

Figure 1 - Risk categories
Note. Source: Adapted from Linsley, P. M. & Shrives, P. J. (2006). Risk reporting: A study of risk disclosures in the annual reports of UK companies. *The British Accounting Review*, 38(4), 401, https://doi.org/10.1016/j.bar.2006.05.002.

The risk categories presented in Figure 1 refer to events that tend to occur more frequently in organizations, with a negative impact. These categories are divided into financial risks (exchange rate, credit, liquidity, commodities and interest rate exposures) and non-financial risks (operational risk, empowerment risk, information processing and technology risk, integrity risk and strategic risk). Such categories are not unique, in the literature there are different types of risks, for the most varied situations.

When managing risks, the company protects and creates value for stakeholders (owners, employees, customers, regulators, society) (Amran et al., 2008). Specifically about the quality of the disclosure, it can be defined in relation to the characteristics of the information that contribute to the predictions of future gains and decision making, quality is recognized as an important factor, however, it needs further investigation (Beretta & Bozzolan, 2008). In this way, attention should be paid not only to the quantity of disclosure, but also to quality (what is disclosed, how it is disclosed and the wealth of information) (Beretta & Bozzolan, 2004).

The quality of the risk disclosure can be characterized in five stages: (i) the company only mentions the risks to which it is exposed; (ii) the company describes the risks and how they affect the company; (iii) the company informs a quantitative measure of the impact of the risk; (iv) the company informs about risk management; (v) the company informs about the types of risk mitigation and instruments used for this purpose (Cabedo Semper & Tirado Beltrán, 2009; Carmona, Fuentes & Ruiz, 2016). This five-stage division goes beyond just identifying and describing risks, it allows you to view risk management and the ways and instruments to mitigate these, considering a complete picture. It includes the quantity and quality of disclosure that is, what the risks are and how they are treated.

2.2 Relationship between corporate governance and the quality of risk disclosure

The disclosure of information is important in order to adequately assess investment risks and the findings reveal that corporate governance mechanisms have a relevant role in providing quality information (Al-Janadi et al., 2012). Thus, corporate governance mechanisms tend to be related to the quality of risk disclosure.

One of the corporate governance mechanisms is the duality of the position of CEO, chairperson of the Board of Directors, that is, the same person occupies the position of CEO, and chairperson of the Board tends to result in less informational content in the disclosed social responsibility report (Lorenzo, Sánchez, & Gallego-Álvarez, 2009). Thus, it also tends to be related to the quality of the risk disclosure, since, when the CEO is also the chairperson of the Board of Directors, the effectiveness of the board can be compromised, as he can control the meetings, select board members, and define the agenda (Haniffa & Cooke, 2002).

In turn, the size of the Board of Directors can contribute to the quality of the information disclosed, as members tend to be more independent in monitoring management in decision-making (Al-Janadi et al., 2012). Bezerra, Lustosa, Sales, e Fernandes (2015) examined the association of the level of shareholding concentration and the size of the Board of Directors with the degree of voluntary disclosure of Brazilian non-financial companies with shares traded on the BM&FBovespa, which, since 2017, has been part of B3. The results show that companies with a larger Board of Directors and that issue American Depositary Receipts at levels II and III have, on average, a higher level of voluntary disclosure.

As for independent members, they tend to have a positive relationship with the disclosure of risks, as they transmit quality to corporate governance (Al-Maghzom et al., 2016). Ettredge et al. (2011) assessed the effects of company size, quality of corporate governance and bad news about compliance with disclosure. The disclosures studied by these authors were those that companies provide in Form 8-K, item 4, when changing external auditors. The results showed that the most active boards and their financial knowledge ensure compliance with information disclosure. Companies that were not in compliance have lower quality corporate governance and less need for external financing.

The audit committee also has a role in disclosing information, as it is associated with disclosure compliance (Ettredge et al., 2011). Audit committees are part of the internal control and corporate governance system and their members must work directly with the Board of Directors (Al-Maghzom et al., 2016).

For risk management, an appropriate committee may be the Risk Committee, although the responsibility for risk management rests with everyone, a Risk Committee refers to a group of the Board of Directors, which contributes to risk management (Subramaniam et al., 2009). Khiari (2013) related the disclosure of information to the corporate governance characteristics of companies listed in Tunisia. The results showed that the characteristics of corporate governance to achieve quality of disclosure are not unique to all companies, they are complementary, and it is a set of practices. The corporate governance structure can show specificities in each company and the adoption of a method for each context, for each company there can be a corporate governance structure, related to the quality of disclosure.

Elshandidy and Neri (2015) examined the influence of corporate governance on risk disclosure practices in the United Kingdom and Italy and the impact of these practices on market liquidity. They found that governance factors influence companies' decisions to disclose risk information. Companies with a strong governance structure tend to provide more significant risk information for decision-making.

Carmona, Fuentes and Ruiz (2016) explored corporate governance practices for risk disclosure by companies. The sample corresponded to 271 Spanish companies. They found that the independence, size, level of activity, gender diversity of the Board of Directors, the duality of the CEO, the independence of the Audit Committee, the Big Four audit and the presence of institutional investors are associated with the disclosure of high risk by companies in their Annual Corporate Governance Report.

Al-Maghzom, Hussainey and Aly (2016) aimed to explore corporate governance and the demographic traits of senior management teams as determinants of voluntary risk disclosure practices in Saudi Arabian banks. They found that external ownership, audit committee meetings, gender, profitability and size of the board are determinants of voluntary risk disclosure practices.

Silva, Granemann and Fischer (2018) analyzed the relationship between the disclosure of risks and the characteristics of Corporate Governance, in highway concessionaires, listed in B3. The risk disclosure had been verified in the management reports and in the explanatory notes. The results showed an inverse relationship between the variable of corporate governance presence of an audit committee and the degree of risk disclosure.

In summary, previous studies indicate that corporate governance mechanisms, such as duality of the position of CEO and chairperson of the Board of Directors, size of the Board of Directors, independent members, expertise of the Board of Directors, number of meetings, audit committee, Big Four and risk committee, tend to influence the quality of information.

3 METHODOLOGICAL PROCEDURES

The study is characterized as descriptive, documentary and quantitative. The companies in the non-cyclical consumer sector, listed in B3, comprise the study population, comprising 32 companies. Of these, four did not have all the information necessary to carry out the study, being excluded from the analysis. Thus, 28 companies are part of the study sample, being four companies from the agriculture sector, three from sugar and alcohol, five from different foods, six from meat and meat products, one from beer and soft drinks, one from food, five from different products , one of cleaning products and two of personal use products.

Data collection was carried out through the B3 website. The corporate governance variables were collected in the reference forms and in the relevant information tab on the B3 website. The disclosure of risks was verified in the reference form. The data refer to the year 2016. Figure 2 is shown with the study construct.

As for the corporate governance variables, the duality of the position of CEO and chairman of the Board of Directors, size of the Board of Directors, independent members, skill / expertise of the Board of Directors were collected in the 2016 reference form, in the section “meeting and administration - composition and professional experience of the administration and the fiscal council ”. The information on the audit committee and the risk management committee was verified in the section “meeting and management - composition of the committees”, in the reference form. The number of meetings of the Board of Directors was obtained from the relevant information about the company, on the B3 website.

The disclosure of risks was verified in the 2016 reference forms, specifically in the risk factor reports (description of risk factors and description of market risks), risk management, and internal controls (description of risk management and description of market risk management). These reports have been downloaded and saved.

Conceptual variable	Operational variable	Operationalization	Authors
Corporate governance	Duality as CEO and Chairman of the Board of Directors (DUALITY)	Dummy variable: 1 if different people occupy the position of CEO and Chairman of the Board and 0 if they are occupied by the same person.	Al-Janadi, Omar, Rahman (2012), Haniffa, Cooke (2002)
	Size of the board of directors (SIZEBD)	Number of members	Al-Janadi, Omar, Rahman (2012)
	Independent Members of the Board of Directors (IBD)	Number of independent members divided by the total number of board members	Al-Janadi, Omar, Rahman (2012), Al-Maghzom, Hussainey, Aly (2016)
	Skill / Expertise of the Board of Directors (EBD)	Number of members with skill / expertise related to administration, accounting and economics divided by the total number of board members	Ettredge et al. (2011)
	Number of meetings of the Board of Directors (MBD)	Number of meetings per year.	Ettredge et al. (2011)
	Audit Committee (AC)	Dummy variable: 1 if the company has an Audit Committee and 0 if it does not.	Al-Maghzom, Hussainey, Aly (2016), Ettredge et al. (2011)
	Big Four Independent Audit (BIGFOUR)	Dummy variable: 1 if the company is audited by Big Four and 0 if it is not.	Al-Janadi, Omar, Rahman (2012), Ettredge et al. (2011)
	Risk Management Committee (RMC)	Dummy variable: 1 if the company has a Risk Management Committee and 0 if it does not.	Subramaniam, MCmanus and Zhang (2009), Yatim (2010)
Risks	Financial Risks: exchange rate, credit, liquidity, commodities and interest rate exposures.	Dummy variable: 1 if you have risk disclosure and 0 if you do not. Performed for each risk category.	Carmona, Fuentes and Ruiz (2016), Linsley and Shrives (2006)
	Non-Financial Risks: Operational Risk, Empowerment Risk, Information Processing and Technology Risks, Integrity Risk and Strategic Risk.		
Quality of Risk Disclosure (QRD)	Step 1: the company only mentions the risks to which it is exposed.	Dummy variable: 1 if you have the stage evidence and 0 if you do not. Performed for each stage	Cabedo Semper e Tirado Beltrán (2009); Carmona, Fuentes and Ruiz (2016).
	Step 2: The company describes the risks and how they affect the company.		
	Step 3: The company reports a quantitative measure of the impact of the risk.		
	Step 4: The company informs about risk management.		
	Step 5: The company informs about the types of risk mitigation and instruments used.		

Figure 2- Study constructor

In this way, each type of risk could have up to five points, which refer to the five stages of disclosure quality. In the end, the sum of the scores for all types of risks was made for each company. Thus, each company could reach up to 25 points for financial risks and 25 points for non-financial risks, totaling 50 points, as these are five types of risk for each category (financial and non-financial), as well as five stages of risk, quality of disclosure. This final score was used for data analysis.

Descriptive statistics, DP2 method and multiple linear regression were applied for data analysis. SPSS was used to apply descriptive statistics and multiple linear regression. The DP2 method was performed using an Excel spreadsheet. The DP2 method, developed by Trapero (1977), allows the formation of a ranking. The method is applied in Excel, from a matrix, in which the lines have the companies and in the columns the variables. Thus, the distance DP2 is calculated using the following formula:

$$DP_2 = \sum_{j=1}^{n} \frac{d_j}{\sigma_j}\left(1 - R^2_{j,j-1,j-2,\dots,1}\right), \text{ com } R_1^2 = 0.$$

Where:

$d_j = d_j(r,k) = \left|x^*_{rj} - x_{ij}\right|$, where r is the reference base;

$\frac{d_j}{\sigma_j}$ is the partial indicator of component j (variable);

When calculating the distance, we have the ranking, in which the lowest value of DP2 represents the best position. The ranking made it possible to identify the companies' scores in terms of disclosure of the five stages for each risk.

4 DISCUSSION OF RESULTS

The variables duality, audit committee, company audited by Big Four and risk committee are not included in the descriptive statistics table because they are dummy variables (0 or 1). Regarding the quality of risk disclosure (QRD), financial and non-financial risks were analyzed. For financial risks, it was verified whether companies showed risks related to the exchange rate, credit, liquidity, commodities and exposure to interest rates. For non-financial risks, operational risk, empowerment risk, information processing and technology risks, integrity risk and strategic risk were verified. For each of these risks (five financial and five non-financial), the five stages of disclosure quality were analyzed. Thus, each company could reach up to 50 points. It appears that 43 was the maximum score achieved and four the minimum score. The overall average score was 21.04.

In the sample, the number of members on the Board of Directors (SIZEBD) varies between three (minimum) and 12 (maximum), the average is seven directors. According to the IBGC (2015), it is recommended between five and eleven members on the Board of Directors and that this number may change according to the sector of activity, size, complexity of activities, stage of the organization's life cycle and need for creation of committees.

With regard to the independence of the Board of Directors (IBD), it appears that at least one company does not have independent members on the Board of Directors (minimum = 0), the maximum was 0.7 and the average 0, 20. The same can be seen in members with skill / expertise (EBD), in which at least one member has no expertise related to administration, accounting and economics. As for the number of meetings of the Board of Directors, it is surprising that there was at least one company that did not indicate that a board meeting was held, in an opposite direction, at least one company declared that there were 29 meetings of the Board of Directors (MBD), while the average was 10 meetings a year. The results of the descriptive statistics of the variables are shown in Table 1.

Table 1
Descriptive statistics of the variables

Variables	Mean	Median	Standard deviation	Minimum	Maximum
Quality of risk disclosure (QRD)	21,04	18,50	8,17	4,00	43,00
Size of the board of directors (SIZEBD)	7,14	6,50	2,74	3,00	12,00
Independence of the Board of Directors (IBD)	0,20	0,19	0,22	0,00	0,70
skill/ expertise of the Board of Directors (EBD)	0,45	0,41	0,24	0,00	1,00
Meetings of the Board of Directors (MBD)	10,46	9,50	7,57	0,00	29,00

Of the 28 companies that make up the sample, 27 companies are shown Step 1 and Step 2 for financial risks and all companies showed these steps (Step 1 and Step 2) for non-financial risks. Step 1 refers only to the mention of the risks to which the company is exposed and Step 2 consists of the description of the risks and how they affect the company.

It appears that only three companies showed Step 3 for financial risks and none for non-financial risks. Step 3 assesses whether the company reports a quantitative measure of the impact of the risk. Steps 4 and 5 had a lower number of disclosures compared to Steps 1 and 2, both for financial and non-financial risks. This is information on risk management (Step 4) and information on the types of risk mitigation, instrument used (Step 5).

These results demonstrate that companies only mention and describe the risks they are exposed to and how they affect it. A smaller number of companies evidences information on quantitative measures of impact, management and risk mitigation. Table 2 shows the number of companies for each stage of the quality of financial and non-financial risk disclosure.

Table 2
Number of companies for each stage of the quality of financial and non-financial risk disclosure

Quality of Disclosure	Financial Risk - Number of companies that showed	%	Non-Financial Risk - Number of companies that showed	%
Step 1 - just mention the risk	27	96,43%	28	100%
Step 2 - describes the risks and how they affect	27	96,43%	28	100%
Step 3 - informs quantitative impact measure	3	10,71%	0	0
Step 4- informs risk management	19	67,86%	12	42,86%
Step 5- informs about the mitigation and instruments used	17	60,71%	9	32,14%
Total companies in the sample	28	100%	28	100%

When analyzing the ranking of companies, it appears that the company Ambev was ranked first, which represents that of the five stages of quality of risk disclosure, it was the company that had the highest score, that is, it showed the five stages more frequently for each risk, demonstrating better quality of disclosure. Based on the DP2 technique, which establishes the ranking, Table 3 is shown.

Table 3
Ranking of companies in descending order

Company	Ranking	Company	Ranking
Ambev	5,100	Brasilagro	20,962
B2W	12,664	Biosev	21,320
BRF	14,288	Advanced	21,648
P. Açucar	14,751	Marfrig	21,684
Saraiva	15,153	Terra Santa	21,896
Josapar	16,149	Forno de Minas	21,922
JBS	16,317	Natura	22,092
Minerva	16,824	São Martinho	22,917
Bombril	17,497	Lojas Americanas	22,984
Dufry	18,170	J Macedo	23,850
Br Home	18,562	Oderich	25,168
M Dias Branco	18,562	Minupar	26,556
Raizen	19,320	Excelsior	26,892
SLS	20,228	Pomifrutas	29,750

Pearson's correlation (data below the diagonal, Table 4) demonstrates a relationship between the quality of disclosure (QRD), the duality of the position of CEO and chairperson of the Board of Directors (Duality) and the size of the Board of Directors (SIZEBD). This same result also verified in Spearman's Correlation (data above the diagonal).

In order to analyze the relationship between corporate governance and the quality of risk disclosure, Multiple Linear Regression was applied, using the ranking of disclosure quality (converted to 100 to represent the best position and 0 to worst), dependent variable and corporate governance variables as independent. With all variables, the model was not significant at the 5% level. Then, regression was applied with the option “method in stages”, in which variables that are not significant are excluded to explain the quality of the risk disclosure.

The Correlation Coefficient (R) showed a 44% association between the variables, The Determination Coefficient (R^2) indicates an explanatory power of 19%. However, with a Durbin-Watson of 1,869, the model showed no problem of auto-correlation of the residues. As shown in Table 5, below, only the variable “size of the Board of Directors” (SIZEBD) explains the quality of the risk disclosure. As much as only one variable showed significance, this result demonstrates that corporate governance has a positive relationship with the quality of risk disclosure, so that the larger the size of the Board of Directors, best tends to be the quality of risk disclosure. IBGC (2015) recommends that the number of members of the

Board of Directors be between five and eleven. In the sample companies, a minimum of three and a maximum of 12 are verified through descriptive statistics, with only one company having 12 members. Thus, within this limit, it appears that the larger the size of the Board of Directors, the better the quality of the risk disclosure tends to be, as the number of members contributes to the perception of risks.

Table 4
Pearson and Spearman correlation

		QRD	DUALITY	SIZEBD	IBD	EBD	MBD	AC	BIGFOUR	RMC
QRD	Correlação	1	0,422*	0,411*	0,291	-0,174	-0,049	0,190	0,249	-0,032
	N	28	28	28	28	28	28	28	28	28
DUALITY	Correlação	0,413*	1	0,419*	0,222	-0,467*	-0,043	0,279	0,224	0,181
	N	28	28	28	28	28	28	28	28	28
SIZEBD	Correlação	0,439*	0,404*	1	0,597**	0,092	0,203	0,562**	0,219	0,283
	N	28	28	28	28	28	28	28	28	28
IBD	Correlação	0,202	0,223	0,547**	1	0,058	0,221	0,402*	0,362	0,267
	N	28	28	28	28	28	28	28	28	28
EBD	Correlação	-0,149	-0,541**	0,060	0,096	1	0,814	0,341	0,332	0,583
	N	28	28	28	28	28	28	28	28	28
MBD	Correlação	0,015	0,006	0,193	0,332	0,080	1	0,186	0,106	0,194
	N	28	28	28	28	28	28	28	28	28
AC	Correlação	0,160	0,279	0,581**	0,418*	0,175	0,147	1	0,142	0,293
	N	28	28	28	28	28	28	28	28	28
BIGFOUR	Correlação	0,328	0,224	0,205	0,345	-0,184	0,087	0,142	1	-0,156
	N	28	28	28	28	28	28	28	28	28
RMC	Correlação	-0,027	0,181	0,295	0,248	-0,128	0,155	0,293	-0,156	1
	N	28	28	28	28	28	28	28	28	28

*. The correlation is significant at the 0.05 level. **. The correlation is significant at the 0.01 level.
Note. Above the diagonal = Spearman correlation; Below diagonal = Pearson's correlation; QRD= Quality of Risk Disclosure; DUALITY= Duality as CEO and Chairman of the Board of Directors; SIZEBD= Size of the board of directors; IBD= Independent Members of the Board of Directors; EBD= Skill / Expertise of the Board of Directors; MBD= Number of meetings of the Board of Directors; AC= Audit Committee; BIGFOUR= Big Four Independent Audit; RMC= Risk Management Committee.

The variables duality of the position of CEO and chairman of the Board of Directors (DUALITY), independence of the Board of Directors (IBD), expertise of the Board of Directors (EBD), number of meetings of the Board of Directors (MBD), the presence of a Audit Committee (AC), a company to be audited by Big Four (BIGFOUR) and the presence of a Risk Committee (RMC), as they were excluded from the model, through the option “step method” in multiple linear regression, are an opportunity to further investigations, perhaps considering other sectors of B3 for comparison purposes.

Table 5
Study variables

	Nonstandard coefficients		Standardized coefficients	T	Sig.
	B	Standard model	Beta		
(Constant)	17,390	9,944		1,749	0,092
SIZEBD	3,240	1,302	0,439	2,488	0,020
Durbin-Watson	1,869				
R	0,439				
R square	0,192				
Sig.	0,020				
N	28				
Excluded variables	Duality, IBD, EBD, MBD, AC, BIGFOUR, RMC				

Note. SIZEBD= Size of the board of directors; DUALITY= Duality as CEO and Chairman of the Board of Directors; IBD= Independent Members of the Board of Directors; EBD= Skill / Expertise of the Board of Directors; MBD= Number of meetings of the Board of Directors; AC= Audit Committee; BIGFOUR= Big Four Independent Audit; RMC= Risk Management Committee.

The result found in this study is in agreement with Al-Janadi et al. (2012) that the size of the Board of Directors can contribute to the quality of information, requiring the disclosure of necessary information to interested parties, as members tend to be more independent in monitoring management in decision-making. Also, the study by Ridhima and Balwinder (2017) highlights that the size of the board and gender diversity have a positive impact on voluntary risk disclosure and the concentration of power in the hands of the largest shareholder has a negligible influence. In the same vein as the study, Bezerra et al. (2015) found that there is a direct association between the size of the Board of Directors and the level of voluntary disclosure.

The effect of corporate governance mechanisms on the quality of risk disclosure corroborates the findings of Al-Maghzom et al. (2016), Carmona, Fuentes and Ruiz (2016), Elshandidy and Neri (2015), Khiari (2013). Corporate governance mechanisms increase incentives for quality disclosure (Khiari, 2013).

O fato de que nem todos os mecanismos de governança terem apresentado significância, pode ser justificado de acordo com Khiari (2013), de que as características de governança não são únicas para todas as empresas, pois trata-se de um conjunto de práticas que se complementam e ainda, em cada empresa pode haver estruturas específicas de governança corporativa relacionadas a qualidade da evidenciação dos riscos.

5 FINAL CONSIDERATIONS

The objective of the study was to analyze the effect of corporate governance on the quality of risk disclosure. A descriptive, documentary and quantitative study was developed. The population refers to companies in the non-cyclical consumer sector listed in [B] 3. The sample consisted of 28 companies that had all the information necessary to carry out the study. The reference forms and the company information page on the B3 website were used for data collection.

The results demonstrate, regarding the quality of the risk disclosure, that of the 28 companies that compose the sample, 27 of these evidenced Step 1 and Step 2 for the financial risks and all companies evidenced these steps (Step 1 and Step 2) for non-financial risks. Only three companies showed Step 3 for financial risks and none for non-financial risks. Steps 4 and 5 had a lower number of disclosures compared to Steps 1 and 2, both for financial and non-financial risks. The results show that companies only to mention and describe the risks to which they are exposed and how they affect it. A smaller number of companies evidences information on quantitative measures of impact, management and risk mitigation.

With the quality of risk disclosure, a ranking was formed using the DP2 technique. To verify the effect of corporate governance on the quality of risk disclosure,
multiple linear regression was applied. Only the size of the Board of Directors (SIZEBD) explains the quality of the risk disclosure, this result demonstrates that the quality of risk disclosure tends to be better when the Board of Directors is larger, within the limit of the number of members recommended by the IBGC (2015), which is a minimum of five and a maximum of 11. This result contributes to indicate that the Board of Directors performs its role related to the evidenced information on risks and that the number of members contributes to the perception of risks. Still, the disclosure of risks contributes to the understanding of the organizational context and the risks that companies are exposed to, being relevant information for the interested parties.

The study's limitations include the selection of only one business sector for analysis, so that research with companies from different sectors can contribute to the understanding of the topic, as well as companies that are not listed in B3.

For future research, it is suggested to check the quality of the risk disclosure by approaching other segments of companies, in order to verify if there is also a greater disclosure only from Steps 1 and 2. Carry out more in-depth studies to improve the understanding of the quality of the risk disclosure, as well as the size of the Board of Directors.

Considering that the governance characteristics are different, there are opportunities for further studies focusing on financial companies. In the same vein, a future study can explore the quality of risk management disclosures and the corporate determinants that lead to this quality.

REFERENCES

Abraham, S. & Shrives, P. J. (2014). Improving the relevance of risk factor disclosure in corporate annual reports. *The British accounting review*, 46(1), 91-107. https://doi.org/10.1016/j.bar.2013.10.002

Al-Janadi, Y., Rahman, R. A., & Omar, N. H. (2012). The level of voluntary disclosure practices among public listed companies in Saudi Arabia and the UAE: Using a modified voluntary disclosure index. *International Journal of disclosure and Governance*, 9(2), 181-201. https://doi.org/10.1057/jdg.2011.19

Al-Maghzom, A., Hussainey, K., & Aly, D. A. (2016). Corporate governance and risk disclosure: evidence from Saudi Arabia. *Corporate Ownership & Control*, *13*(2), 145-166. http://dx.doi.org/10.22495/cocv13i2p14

Amran, A., Bin, A. M. R., & Hassan, B. C. H. M. (2008). Risk reporting: An exploratory study on risk management disclosure in Malaysian annual reports. *Managerial Auditing Journal*, *24*(1), 39-57. https://doi.org/10.1108/02686900910919893

Antonelli, R. A., Portulhak, H., Scherer, L. M., & Clemente, A. (2018). Impacto da adesão aos níveis diferenciados de governança corporativa da BM&FBovespa no risco de companhias reguladas. *Revista de Contabilidade do Mestrado em Ciências Contábeis da UERJ*, *23*(2), 92-109.

Beretta, S., & Bozzolan, S. (2004). A framework for the analysis of firm risk communication. *The International Journal of Accounting*, 39(3), 265-288. https://doi.org/10.1016/j.intacc.2004.06.006

Beretta, S. & Bozzolan, S. (2008). Quality versus quantity: the case of forward-looking disclosure. *Journal of Accounting, Auditing & Finance*, 23(3), 333-376. https://doi.org/10.1177/0148558X0802300304

Bezerra, P. C. S., Lustosa, P. R. B., Sales, I. C. H., & Fernandes, B. V. R. (2015). Estrutura de propriedade, conselho de administração e disclosure voluntário: evidências de empresas brasileiras de capital aberto. *Revista Universo Contábil*, *11*(2), 25-46. 10.4270/RUC.2015210

Cabedo Semper, J. D., & Tirado Beltrán, J. M. (2009). Divulgación de información sobre riesgos: una propuesta para su medición. *Innovar*, *19*(34), 121-134.

Carmona, P., Fuentes, C., & Ruiz, C. (2016). Risk disclosure analysis in the corporate governance annual report using fuzzy-set qualitative comparative analysis. *Revista de Administração de Empresas*, 56(3), 342-352. https://dx.doi.org/10.1590/S0034-759020160307

Chen, S.& Lee, T. (2013). Risk disclosure, risk management, and bank value-at-risk: International study. Retrieved from http://iafor.info/archives/offprints/abmc2013-offprints/ABMC2013_0269.pdf

Committee of Sponsoring Organizations of the Treadway Commission (COSO) (2004). *Enterprise Risk Management - Integrated Framework*, AICPA: New York.

Elshandidy, T. & Neri, L. (2015). Corporate governance, risk disclosure practices, and market liquidity: comparative evidence from the UK and Italy. *Corporate Governance: An International Review*, 23(4), 331-356. https://doi.org/10.1111/corg.12095

Ettredge, M., Johnstone, K., Stone, M., & Wang, Q. (2011). The effects of firm size, corporate governance quality, and bad news on disclosure compliance. *Review of Accounting Studies*, 16(4), 866-889. https://doi.org/10.1007/s11142-011-9153-8

Haniffa, R. M. & Cooke, T. E. (2002). Culture, corporate governance and disclosure in Malaysian corporations. *Abacus*, 38(3), 317-349. https://doi.org/10.1111/1467-6281.00112

Inácio-Soares, J. M. I., & Marcon, R. (2019). Mecanismos internos de governança e a participação acionária de estrangeiros: uma análise das companhias abertas brasileiras. *Revista Eletrônica de Negócios Internacionais: Internext*, *14*(3), 251-264. http://dx.doi.org/10.18568/internext.v14i3.497

Instituto Brasileiro de Governança Corporativa (IBGC) (2015). Código das melhores práticas de governança corporativa. 5 ed. São Paulo: IBGC.

Instituto Brasileiro de Governança Corporativa (IBGC) (2017). Gerenciamento de Riscos Corporativos: Evolução em Governança e Estratégia. São Paulo: IBGC.

Khiari, W. (2013). Corporate governance and disclosure quality: Taxonomy of Tunisian listed firms using the decision tree method based approach. *Emerging Markets Journal*, 3(2), 46. https://doi.org/10.5195/emaj.2013.33.

Linsley, P. M. & Shrives, P. J. (2006). Risk reporting: A study of risk disclosures in the annual reports of UK companies. *The British Accounting Review*, 38(4), 387-404. https://doi.org/10.1016/j.bar.2006.05.002

Lorenzo, J. M. P, Sánchez, I. M. G, & Gallego-Álvarez, I. (2009). Características del consejo de administración e información en materia de responsabilidad social corporativa. *Spanish Journal of Finance and Accounting/Revista Española de financiación y contabilidad*, 38(141), 107-135. https://doi.org/10.1080/02102412.2009.10779664

Mallin, C. (2002). The relationship between corporate governance, transparency and financial disclosure. *Corporate Governance: An International Review*, 10(4), 253-255. https://doi.org/10.1111/1467-8683.00289

Miihkinen, A. (2012). What drives quality of firm risk disclosure?: the impact of a national disclosure standard and reporting incentives under IFRS. *The International Journal of Accounting*, 47(4), 437-468. https://doi.org/10.1016/j.intacc.2012.10.005

Nascimento, A. M., & Reginato, L. (2008). Divulgação da informação contábil, governança corporativa e controle organizacional: uma relação necessária. *Revista Universo Contábil*, 4(3).

Mousa, G. A. & Elamir, E. A. (2014). The effect of governance mechanisms on the quality of risk disclosure: using bootstrap techniques. *American Journal of Finance and Accounting*, *3(* (2/3/4), 128-151.

Okimura, R. T. (2003). *Estrutura de propriedade, governança corporativa, valor e desempenho das empresas no Brasil*. Dissertação de Mestrado, Faculdade de Economia, Administração e Contabilidade, Universidade de São Paulo, São Paulo, SP, Brasil.

Subramaniam, N., Mcmanus, L., & Zhang, J. (2009). Corporate governance, firm characteristics and risk management committee formation in Australian companies, *Managerial Auditing Journal*, 24(4), 316-339. https://doi.org/10.1108/02686900910948170

Ridima, S. & Balwinder, S. (2017). Corporate governance and risk reporting: Indian evidence. *Managerial Auditing Journal*, 32(4/5), 378-405.

Organización para la coperación y el desarrollo económico (OCDE). Riesgos Ambientales y Seguros. n 6. 2007. Retrieved from < https://books.google.com.br/books?id=sGm3YpPL2tkC&pg=PA3&lpg=PA3&dq=Organizaci%C3%B3n+para+la+cooperaci%C3%B3n+y+el+desarrollo+econ%C3%B3mico.+Riesgos+Ambientales+y+Seguros.&source=bl&ots=eG5lnpFeJN&sig=5yYVMfwSmXSBJf5rCANVeniYC0g&hl=pt-BR&sa=X&ved=0ahUKEwij7bPHg5TYAhVHUZAKHc0tApMQ6AEIKjAA#v=onepage&q=Organizaci%C3%B3n%20para%20la%20cooperaci%C3%B3n%20y%20el%20desarrollo%20econ%C3%B3mico.%20Riesgos%20Ambientales%20y%20Seguros.&f=false>

Shleifer, A. & Vishny, R. W. (1997). A survey of corporate governance. *The journal of finance,* 52(2), 737-783. DOI: https://doi.org/10.1111/j.1540-6261.1997.tb04820.x

Siagian, F., Siregar, S. V., & Rahadian, Y. (2013). Corporate governance, reporting quality, and firm value: evidence from Indonesia. *Journal of accounting in emerging economies*, 3(1), 4-20. https://doi.org/10.1108/20440831311287673

Silva, M. Z., Granemann, C. M., & Fischer, D. (2018). Evidenciação de riscos e a relação com a governança corporativa em concessionárias de rodovias Brasileiras/Evidence of risks and the relationship with corporate governance in Brazilian highway concessionaires. *Brazilian Journal of Development*, *4*(4), 1359-1378.

Silveira, A. D. M. (2004). *Governança corporativa e estrutura de propriedade: determinantes e relação com o desempenho das empresas no Brasil*. Tese (doutorado em Administração) - Departamento de Administração da Faculdade de Economia, Administração e Contabilidade da Universidade de São Paulo, São Paulo. Retrieved from http://www.teses.usp.br/teses/disponiveis/12/12139/tde-23012005-200501/en.php

Solomon, J. F., Solomon, A, Norton, S. D. & Joseph, N. L. (2000). A conceptual framework for corporate risk disclosure emerging from the agenda for corporate governance reform. *The British Accounting Review*, *32*(4), 447-478. https://doi.org/10.1006/bare.2000.0145

Taylor, G., Tower, G., & Neilson, J. (2010). Corporate communication of financial risk. *Accounting & Finance*, 50(2), 417-446. https://doi.org/10.1111/j.1467-629X.2009.00326.x

Yatim, P. (2010). Board structures and the establishment of a risk management committee by Malaysian listed firms. *Journal of Management & Governance,* 14(1), 17-36. https://doi.org/10.1007/s10997-009-9089-6

Efeito da Governança Corporativa na Qualidade da Evidenciação dos Riscos

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RESUMO

Objetivo*:* Analisar o efeito da governança corporativa na qualidade da evidenciação dos riscos, em empresas do setor de consumo não cíclico, listadas na B3.

Método: Fazem parte da amostra do estudo 28 empresas do setor de consumo não cíclico, listadas na B3. A estatística descritiva, técnica DP_2 e regressão linear múltipla foram utilizadas para a análise dos dados.

Originalidade/Relevância: Esse estudo se difere dos demais ao envolver um conjunto de variáveis de governança corporativa e relacioná-las com a qualidade da evidenciação dos riscos, que contempla o conteúdo que é divulgado.

Resultados: Demonstrou-se que, quanto maior é o tamanho do Conselho de Administração, melhor tende a ser a qualidade da evidenciação dos riscos**.**

Contribuições teóricas/metodológicas: Esta pesquisa contribui para a área contábil ao indicar que o Conselho de Administração desempenha seu papel relacionado às informações evidenciadas sobre riscos e que o número de membros colabora para a percepção dos riscos.

Palavras-chave*:* Governança Corporativa. Qualidade. Evidenciação dos Riscos.

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