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DISCLOSURE VOLUNTARY, ABNORMAL RETURN AND THE EFFECT OF LEVELS OF CORPORATE GOVERNANCE IN THE PUBLICLY HELD COMPANIES LISTED ON B3

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Resumo/Abstract

This work aims to analyze the market reaction regarding the informational content that the Voluntary Disclorure (DV) promotes, through the accumulated Abnormal Return (RA) of the companies segmented in the different levels of Corporate Governance (GC) of the Brazilian Stock Exchange (B3). Under the methodological aspect, the event study was used to evaluate the effects of the DV, interacting with the GC, measured through the accumulated RA of the shares of the companies listed in B3. The research is justified by the fact that the topic has not yet been explored in the scientific community, where the effect that the disclosure of disclosure by companies with a different level of KM has on the accumulated AR. Through the use of a linear regression, it was possible to identify that the DV, specifically from the Notice to the Market category, promoted a different reaction in the normal accumulated return of the shares of the listed Brazilian companies, which are segmented in the different levels of CG, during the base period from 2010 to 2019. Thus, this study contributes and highlights new results in a context not yet studied in the Brazilian market.

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Abstract

This work aims to analyze the market reaction regarding the informational content that the Voluntary Disclorure (DV) promotes, through the accumulated Abnormal Return (RA) of the companies segmented in the different levels of Corporate Governance (GC) of the Brazilian Stock Exchange (B3). Under the methodological aspect, the event study was used to evaluate the effects of the DV, interacting with the GC, measured through the accumulated RA of the shares of the companies listed in B3. The research is justified by the fact that the topic has not yet been explored in the scientific community, where the effect that the disclosure of disclosure by companies with a different level of KM has on the accumulated AR. Through the use of a linear regression, it was possible to identify that the DV, specifically from the Notice to the Market category, promoted a different reaction in the normal accumulated return of the shares of the listed Brazilian companies, which are segmented in the different levels of CG, during the base period from 2010 to 2019. Thus, this study contributes and highlights new results in a context not yet studied in the Brazilian market.

Keywords: Voluntary Disclosure; Corporate Governance; Abnormal Return.

1. Introduction

This study addresses how the relationship between GC and DV occurs with abnormal return.

Several authors have studied subjects such as Corporate Governance (GC), Voluntary Disclosure (DV) and Abnormal Return (RA), however, independently. That is, there are studies on the relationship of each of these separate variables. Among the studies, those of Verrecchia (2001), Tihanyi, Graffin and George (2014), Guay, Samuels and Taylor (2016) and Dayanandan, Donker and Karahan (2017) stand out, who found evidence that the informational content disclosed by the companies, through the DV, it is influenced by the level of KM of the companies, and with this, it promotes effects on the variation of the companies' values.

In general, KM is understood to be a system, in which it monitors the actions of companies, as well as controlling their decisions (Rabelo and Silveira, 1998). Specifically, it appears that the GC carries out actions with the intuition to promote the protection of the company's external investors from the decisions taken by the company's internal agents, such as: managers, shareholders and controllers (La Porta, Lopez-de-Silanes, Shleifer and Vishny, 2000).

About DV, it is done by the company involved, and can be defined as the disclosure of informational content in a discretionary manner, that is, without any pre-established condition (Skillius and Wennberg, 1998), and considers the cost and benefit relation for the disclosure of the company's informational content. Based on this same premise, Dye (2001) adds that the DV can be considered a particular case involving Game Theory, in other words, the author verified that companies voluntarily disclose their information content, and are basedin beneficial conditions for the company, and that promotes a better result.

The statement made by publicly traded companies for the market, with relevant qualitative and quantitative information, through their communication channels (Locatelli, Nossa and Ferreira, 2020) is considered as DV, such as acquisitions made by companies, clarifications provided by companies on consultations formulated by the CVM, materials disclosed from board meetings, etc. Thus, the levels of transparency and good KM practices of

the companies that make up the Brazilian capital market are raised (Alves Junior and Galdi, 2020).

The informational content of the DV has an effect on the market value of a company, and disclosure is influenced by the KM levels of the listed companies. The studies presented so far show that there is a gap, since in the Brazilian market, the moderate effects of the differentiated levels of KM in the relationship between the DV of publicly-held companies and the RA of companies listed in B3 have not yet been analyzed.

Starting from the presented context, this work intends to solve the following problem question: What is the effect of the DV moderated by the differentiated levels of KM in the return of shares of the companies listed in B3?

To answer this question, this paper aims to verify the market's reaction to the relevance of the informational content that DV (specifically for the Notice to the Market category) produces, through the accumulated RA of the shares of Brazilian companies listed on B3 and segmented at differentiated GC levels.

It can be seen that the effect of KM levels on voluntary disclosure of information, especially in public companies listed in B3, has not yet been definitively explored by the literature, especially in the case of Brazil. Thus, this study will contribute to the expansion of studies on the relationship between KM and DV with RA, in the context of Brazilian companies listed in B3, thus developing the theory on these subjects and the results of this research aim to contribute to the market of Brazilian capitals, specifically with the identification of the relevance of the informational content of companies with different levels of KM in periods of DV, through their accumulated RA (Ball and Shivakumar, 2008; Locatelli et al., 2020.; Alves Junior and Galdi, 2020). What sets this research apart from other studies is the moderating effect of KM on the relationship of disclosure and the RA of the shares of companies listed in B3.

The research justification was based on the identification of the need pointed out in the study by Dye (2001), where he addresses the importance of expanding studies related to the theme of disclosure, and by Ball and Shivakumar (2008) and Consoni and Douglas Colauto (2016), who address the importance of verifying whether companies with differentiated levels of KM promote the dissemination of information content with greater relevance, given the importance that well-structured companies, from the point of view of good management practices, have for the stock market.

Regarding the methodological aspect, the research in question made use of the event study methodology, considered the window of the day for the company's voluntary disclosure and compared the result with the average values of the companies' returns for the other days, in order to verify in a specifies, the influence of DV on the performance of the market value of listed companies. In this study, the AR was represented by the accumulated AR.

The moderating effect of the relationship between disclosure and RA is captured by the interaction between the different level of governance with RA. The categories created by the Stock Exchange in the 2000s were considered as a differentiated level of governance, such as: Bovespa Mais, Level I, Level II and New Market. In this study, it is considered as the DV, the information of qualitative and quantitative nature, especially the category Notice to the Market, disclosed voluntarily by the companies, in their communication channels.

Finally, a sample of 867 companies was used, from 2010 to 2019, and the data were extracted from Economatica and the Brazilian Securities and Exchange Commission (CVM). The choice of the method used, event study, is based on the adaptation of the studies carried out by Ball andShivakumar (2008),Locatelli et al. (2020) and Alves Junior and Galdi (2020).

2. Theoretical Foundation
2.1. Voluntary Disclosure and Market Value

According to Skillius and Wennberg (1998), the DV can be defined with the information disclosure process by the company, free of pre-established conditions, communicates relevant information to the market, considers its cost benefit in the disclosure process and assists investors to make decisions that can maximize companies' value. In this sense, Dye (2001) complements about DV as a particular case of disclosure, in which the company evaluates the disclosure of important information to the market, according to the benefits that it may bring to the company itself.

According to Nunes, Santos and Costa Marques (2020), the disclosure theory consists of a line of research whose objective is the study of the particularities of the disclosures of economic and financial information, by the publicly-held companies listed on the stock exchanges.

In this context, Verrecchia (2001) developed a theoretical study on disclosure, stated that until that moment there was no theory capable of covering and unifying the aspects related to the disclosure of information considered relevant for companies, and thus created the theory of disclosure. The author found that the disclosure of external information was related to market variables, such as the variation in the price of shares of publicly-held companies, as well as the volume of shares traded.

Dye (2001) criticized the study by Verrecchia (2001), claimed that he agreed, in part, on not having a standard model of disclosure, and therefore did not consider the idea as a theory for the disclosure of voluntary information. However, the author agreed that such a theory could serve very well for the disclosure of mandatory information.

The DV of information about companies' operations can influence the price of their shares in the market (Bourveau and Schoenfeld, 2017). In this sense, Veldkamp (2006) adds that the movement of a company's stock price can be driven by the information they disclose, whether good or bad. It involves financial, strategic, environmental, social information, among other natures, considering its informational content, from the point of view of the relevance of its value.

Studies by Verrecchia (1983) and Dye (1985) reported that since the 1980s, the Theory of Disclosure has been studied in accounting. These surveys were focused on explaining the phenomenon of making financial information available to the market, through disclosure, under various aspects, such as, for example, verifying the effect caused by the disclosure of the companies' financial statements.

Thus, the relevance of the informational content disclosed by companies to the market is able to influence the accumulated AR, based on the information disclosed. When it brings relevant content for pricing, it causes a reaction in the market, which after receiving the news, updates its expectations, and this is captured by the abnormal return. This is because disclosure increases the credibility of the information disclosed (Chung, Go, Ng and Yong, 2017).

Information such as: projections of future earnings, KM structure, liquidity, profitability, strategies, etc., are considered relevant. The market is able to know the benefits promoted by them, evaluate their quality and can raise the price of the shares of the companies that publish them, by the accumulated RA of their shares listed on the stock exchange in specific periods (Veldkamp, 2006).

For Wen (2013), the companies with the highest levels of DV, tend to be priced by the market, in order to generate greater wealth for shareholders, caused by the lower information asymmetry.

The concept of DV refers to the disclosure of information on a voluntary basis by companies (Dye, 2001), and considers the category of disclosure communicated to the market, which involves the disclosure of relevant informational content such as acquisitions made by companies and clarifications provided by companies on consultations formulated by the CVM.

In addition, it considers that this information disclosed promotes a differentiated reaction by the market. From this commented concept, we have the first hypothesis of this study.

H1: The greater the relevance of the informational content of the DV, of announcements to the market, the greater the accumulated AR of the companies listed in B3.

2.2. Corporate Governance and Market Value

When analyzing the relationship between GC and the companies' market value, La Porta, Lopez-de-Sinales, Shleifer and Vishny (1998) identified in their study that this relationship has a relevant connection with the role of accounting in relation to the disclosure of information necessary and important.

The international literature points out that agency and results management problems were the precursors to demand the development of KM, among them, the cases of Enron and WorldCom stand out, which were responsible for reforms and improvements in governance worldwide (Tihanyi et al., 2014).

For Bar-Yosef and Prencipe (2013), when a company's result is affected by information asymmetry, this fact is observed by the investor. Thus, this investor tends to look at the quality of the company's KM as a risk factor that influences its market value. In this sense, Cheng, Lee and Shevlin (2016), found evidence in their studies that the levels of KM practiced by companies can influence their earnings, earnings management and, consequently, their market value.

In Brazil, Kitagawa (2007) highlighted in his study that KM started to develop in the 90's, when there was an economic growth of the stock market. The 1990s also coincided with the period when interest rates dropped, which increased opportunities in the stock market.

In the early 2000s, the GC levels were created in the Brazilian stock market, with the intention of promoting the development of the Brazilian capital market, based on international markets and aligned with the objectives pursued by the managers with the same interests as the shareholders of the companies (Nascimento, 2003; Ferraz and Santos Júnior, 2021).

Regarding the differentiated levels and characteristics of KM in the Brazilian capital market, in Figure 1 a comparison of each segment stood out, according to the levels: New Market, Level 2, Level 1 and Bovespa Mais.

	NEW MARKET	LEVEL 2	LEVEL 1	BOVESPA MORE
Characteristics of Shares Issued	Allow only ON shares	Allows ON and PN shares (with additional rights)	Allows ON and PN shares (according to legislation)	Only ON shares can be traded and issued, but PN is allowed
Minimum Free Float Percentage	At least 25% free float			25% free float up to the 7th year of listing, or minimum liquidity conditions
Public share distributions	Equity dispersion efforts			There is no rule
Prohibition of statutory provisions (from 05/10/2011)	Voting limitation lower than 5% of the capital, qualified quorum and "stone clauses"		There is no rule	
Composition of the Board of Directors	Minimum of 5 members, of which at least 20% must be independent with a unified mandate of up to 2 years		Minimum of 3 members (according to legislation)	

Prohibition against the accumulation of positions (as of 05/10/2011)	Chairman of the board and chief executive officer or chief executive officer for the same person (3-year grace period from accession)			There is no rule
Obligation of the Board of Directors (as of 05/10/2011)	Statement on any public offering for the acquisition of shares in the company		There is no rule	
Financial Statements	Translated into English		According to legislation	
Annual public meeting and calendar of corporate events	Mandatory			Optional
Additional disclosure of information (as of 10/05/2011)	Securities trading policy and code of conduct			There is no rule
Tag Along Grant	100% for ON shares	100% for ON and PN shares	80% for ON shares (according to legislation)	100% for ON shares
		100% for ON shares and 80% for PN (until 05/09/2011)		
Public offer for acquisition of shares at least for economic value	Mandatory in the event of delisting or exit from the segment		According to legislation	Mandatory in the event of delisting or exit from the segment
Adherence to the Market Arbitration Chamber	Mandatory		Optional	Mandatory

Figure 1- Comparison of the Bovespa Listing Segments.
Source: Adapted from Brasil Bolsa Balcão - B3 (2020).

The fulfillment of companies' obligations in the Brazilian capital market is related to the differentiated KM levels of listed companies, and to the information disclosed (financial and non-financial) by them. This information favors the business environment and makes the market react differently to the information disclosed by companies with different levels of KM (Lanzana, Silveira and Famá, 2006; Martins, Siqueira and Sousa, 2019). Considering the relevance of the informational content disclosed, Hypothesis 2 is formulated:
H2: Companies listed at differentiated GC levels have a higher accumulated RA.

Regarding the characteristics of the GC levels, according to Brasil Bolsa Balcão - B3 (2020), the first three levels (Level I, Level II and New Market) are considered as differentiated levels. In the New Market, there are companies with differentiated listing rules, described in Figure I, that is, companies listed at this level have adopted more stable KM practices (B3, 2020). Levels I and II, on the other hand, were created to encourage and prepare publicly-held companies to join the New Market (B3, 2020).

Therefore, this research aims to verify the effect of different levels of governance with the disclosure of voluntary information and the market value of listed companies. In this study, the market value is represented by the accumulated RA, and thus Hypothesis 3 is formulated:
H3: The accumulated AR increases as the company that discloses voluntary information is a company with a different level of governance.

3. Methodology

3.1. Research and Sample Structure

This work has the approach to carry out a quantitative, descriptive research, based on secondary data. Quantitative research was chosen as a way to use numerical data to perform a statistical and descriptive analysis, using a simple linear regression, to assess the accumulated AR caused by the DV of companies with differentiated levels of KM in the Brazilian stock market (Raupp and Beuren, 2006).

This research is a quantitative research that aimed to evaluate the market reaction on the relevance of the informational content that the DV (specifically for the Notice to the Market category) produces through the accumulated RA of the shares of Brazilian companies listed in B3 and segmented at differentiated GC levels. To this end, a survey of secondary data obtained from the Economatica database was carried out, all types of share classes of publicly-held companies listed as active in B3 were considered, the period from 01/01/2010 to 31/12/2019.

The Notice to the Market is a voluntary disclosure category standardized by the Brazilian Securities and Exchange Commission - CVM, through the Reference Form. This document discloses relevant acts or facts that the companies deem necessary to disclose, but are not required by the CVM. Such documents involve periodic and non-periodic information, in order to pass on to the investor market specific content that the company wishes to make public, such as: the acquisitions made by the companies, clarifications provided by the companies about consultations formulated by the CVM, materials disclosed by board meetings and etc.

Through the proposed statistical model, it is intended to identify how much new relevant information of a voluntary nature the companies are disclosing. Verify whether companies with differentiated levels of KM voluntarily deliver a larger set of information, from the point of view of the relevance of value and the effect of these variables on the abnormal accumulated returns of the companies listed in B3.

$$CAR_{year} = \beta_0 + \beta_1 CAR\ Voluntary_{it} + \beta_2 Governance_{it}$$
$$+ \beta_3 CAR\ Voluntary\ .\ Governance + \beta_4 CAR\ Mandatory_{it}$$
$$+ \sum Controls + \mathcal{E}$$

(1)

The model in equation 1, aims to analyze the relevance of the information content voluntarily disclosed by the listed companies, during a certain disclosure window and to identify the effect that CAR_Voluntary (β_1)has on the dependent variable CARYear in a given period, which allows us to answer the first research hypothesis. Specifically the coefficient$\beta_1$indicates the effect of the informational relevance that voluntary disclosure (CAR_Voluntary) promotes in the accumulated RA of companies. For this independent variable, the Notice to the Market category was considered, considered voluntary by the Securities and Exchange Commission. It is considered that this category may have a greater impact on the market's reaction to the appreciation of publicly-held companies listed on B3.

Governance (β_2) aims to analyze the differentiated levels of KM and its effect on CAR_Voluntary (β_1) and, consequently, CARYear as well. Thus, it identifies the$\beta_2$as a dummy, it is considered 1 for companies with differentiated levels of KM (Level 1, Level 2 and New Maket) and 0 for companies classified at the Bovespa Mais level, in which it was possible to answer the second research hypothesis.

The coefficient β_3 *(CAR_Voluntary. Governance)*it allows to differentiate how much relevant informational content is generated in the voluntary disclosure window for the purpose of comparing the abnormal accumulated return, for specific companies, which have different

levels of corporate governance. This differentiation is made through the interaction between CAR_Voluntary and Governance, and allows to answer the third hypothesis of the research.

3.2. Calculation of Accumulated Abnormal Returns

For the calculation and identification of AR, the statistical model (Equation 2) was considered, being the same adjusted to the characteristics of the Brazilian market, making use of AR calculations in event studies (Brown and Warner, 1980; Locatelli et al., 2020; Alves Junior and Galdi, 2020).

$$AR_{it} = R_{it} - Rm_t$$
(2)

Where:
ARit = RA of Action i on date t.
Rit = Return on Share i on date t.
Rmt = Average Market Return on date t.

Then, the return on shares of all the companies listed on B3 was calculated, and it was used as a reference every day of the base period of this research, using the logarithm method, using Equation 3:

$$R_{it} = Ln\left(\frac{P_t}{P_{t-1}}\right)$$
(3)

Where Rit is the rate of return of share i on date t, for all periods that occurred on the stock exchange in the years 2010 to 2019. Pt is the price of share i on date t and Pt-1 is the price gives action on date t-1.

Then, the Average Market Return on date t was calculated, using the Market Value-Weight Return method (Equation 4), adding the return of the entire portfolio of assets weighted by their respective trading volume on date t in reais Wit considering the total value of a company in the capital market on date t in reais Rt.

$$RM_t = \sum_{t=t1}^{T} R_t \cdot W_{it}$$
(4)

As a way to standardize the abnormal returns on the different assets of Brazilian companies listed in B3, the return on the expressive amount of the share was divided by a standard deviation, which created an AR Coefficient (SAR) (Equation 5), similar to the one used in the studies by McWilliams and Siegel, (1997), Locatelli et al. (2020) and Alves Junior and Galdi (2020):

Standardized Abnormal Return: $$SAR = \frac{AR_{it}}{\sigma_{it}}$$
(5)

Where ARit = RAda Action i on date t and σ_i = Standard Deviation of Action i on the event date, the previous 365 days were considered for the calculation.

Finally, the accumulated RA of the stock was calculated, the event window was considered through the CAR (Cumulative Abnormal Return) (Equation 6) by the sum of the standardized abnormal returns, similar to the studies by Beyer, Cohen, Lys and Walther (2010), Locatelli et al. (2020) and Alves Junior and Galdi (2020):

$$CAR_{i(t1,t2)} = \sum_{t=1}^{T2} SAR_{it}$$
(6)

Where CARit is the active RAdo, t1 is the first day of the event window, t2 is the last day of the event window and SARit is the abnormal return coefficient.

3.3. Control Variables

Considering that the proposed statistical model has weaknesses, control variables were considered, with the intention of minimizing possible dissonant effects, considering the study by Locatelli et al. (2020).

Through the control variables listed below (Figure 2), it was decided to use indicators based on accounting information that are relevant for shareholders, investors and the market as a whole (Gompers, Ishii and Metrick, 2003):

Variable	Analysis Type	Formula	Literature
Return on Assets (ROA)	Profitability	Net Income / Total Assets	Haniffa and Cooke (2005); Lee and Ng (2009); Fonseca Minardi, Sanvicente and Monteiro (2006).
Trading on the Stock Exchange	Equity Liquidity	$LIQ = 100x\left(\dfrac{Z}{P}\right)x\sqrt{\left(\dfrac{n}{N}\right)x\left(\dfrac{Y}{V}\right)}$	Consoni and Douglas Colauto (2016)
Total Assets	Size	Ln Total Assets	Costa, Goldner and Galdi, (2007), Consoni and Douglas Colauto (2016); Elfeky (2017).
Degree of Financial Leverage	Indebtedness	Current Liabilities + Non-current Liabilities / Total Assets	Lan et al. (2013);Elfeky (2017).
Book to Market (BtM)	Growth Opportunity	Net Worth Market Value / Book Value of Net worth	Chen and Zhao (2006); Bastos, Nakamura and Basso (2009).
Volatility	Risk	EBITDA / Total Assets	Fonseca and Silveira (2016); Cook et al. (2017).

Figure 2: Control variables
Source: Elaborated by the author.

Considering that other factors, besides the DV and the GC can influence the accumulated AR of the companies listed in B3, six control variables were inserted in the econometric model of this study, using them in other literature, in order not to bias the sample used , as well as ensuring the robustness of the analyzes carried out in the research results.

3.4 Data Treatment

In this research, the following methodological procedures for data processing were carried out: the sample started with 5,240 observations, in which there was, first, the exclusion of 1,790 observations because they represent companies with no common share classes. Continuing with the treatment of the data, the result of 3,450 from the previous sampling was used and 2,583 more observations were excluded for presenting missing values variations, that is, incomplete information that could compromise the generation of the results. Thus, a final database with 867 observations to be used remains, this base being won by 1% (excluding outliers) for better quality of analysis.

4. Results

4.1. Descriptive statistics

Analyzing Table 1, which represents the descriptive statistics of the regression, it is observed that the CAR_Voluntary event has positive results and symmetrical to its median, when compared, for example with the CAR_Mandatory. This suggests that, on average, events related to the disclosure of relevant and non-mandatory information content, in particular the Notice to the Market category, may be related to the volatility of the assets listed on the stock exchange, since the average accumulated AR presented results of mean and median greater than 1.

Still on Table 1, it was noticed that in the sample of 867 companies analyzed and that promoted the DV of information in the base period, 85% are companies that are at differentiated levels of KM, that is, they are between Levels 1, 2 and the New Market. Therefore, they are companies that have good management practices and are different from other companies segmented at the Bovespa Mais Level, in terms of compliance with obligations and transparency in the disclosure of information to their shareholders in the Brazilian capital market (Aguiar, 2018).

Table I: Descriptive Statistics of Variables.

This table presents the statistical description of the variables that were used in this study, based on a model, identifying their position and dispersion measures, relating the information of the shares of the Brazilian open companies listed in B3 in the period from 2010 to 2019.

Variable	Obs	Average	Median	Detour Pattern	1° Quartile	3° Quartile	Minimum	Maximum
CAR_Year	867	2,73	2,32	11,89	-5,26	10,25	-25,41	37.40
CAR_Voluntary	867	0,02	0,02	1,71	-1,00	1,18	-4,62	4,29
Governance	867	0,85	1,00	0,36	1,00	1,00	0,00	1,00
CAR_Vol. Gov	867	0,01	0,00	1,55	-0,81	0,93	-4,62	4,29
CAR_Mandatory	867	-0,00	0,03	1,06	-0,65	0,69	-2,78	2,93
Equity Liquidity	867	0,29	0,09	0,45	0,01	0,37	0,00	2,27
Profitability - ROA	867	0,01	0,03	0,18	-0,01	0,08	-1,17	0,35
Indebtedness	867	0,71	0,59	0,68	0,46	0,74	0,11	5,45
Size	867	15,05	15,05	1,75	13,97	16,96	8,81	19,18
Book-to-Market	867	2,30	1,46	2,83	0,74	3,01	-4,57	15.53
Volatility	867	0,07	0,10	0,15	0,04	0,15	0,04	0,34

Source: Elaborated by the author.

From the results presented in Table 1, it was found that the average of the descriptive statistics above demonstrates that both CAR_Voluntary and Governance interacted with each other, and presented, on average, positive result values, whereas CAR_ Mandatory presented negative values (Table 1).

In this sense, it was noticed that CAR_Year, has a positive average return and above 1. This suggests a different reaction by the market in relation to the DV of informational content disclosed by companies in the Notice to Market category. Thus, from the point of view of value relevance, with differentiated levels of KM, they promote an accumulated AR in the market value of companies listed in B3, in general in the base period (Table 1).

The consolidated results suggest that the abnormal returns, in general, were positive for the base years surveyed. In this sense, it was found that the informational content disclosed, through the companies' DV, brought relevant information and promoted changes in the stock prices of listed companies and, consequently, in their market value, considering companies with differentiated GC levels. . These results are specific to the disclosure of voluntary information related to the Notice to the Market category (Table 1).

4.3. Regression Result

From Table 2, the results of the regression were presented, in which it considers the effect of the relevance of the informational content of the voluntary disclosure referring to the category Notice to the Market on the market value in the RA accumulated over the year (CAR_Year) of the companies listed Brazilian companies, the variation between the period 2010 to 2019 was considered.

Regarding the criteria of the segments of the differentiated GC levels and with the intention of developing the Brazilian capital market, B3 classified GC in different company profiles, such as the Bovespa Mais, Level 1, Level 2 and New Market segments.

The Bovespa Mais segment is the lowest level of KM, as it was created to serve small and medium-sized companies that wish to enter the capital market gradually. At level 1, there is the lowest level of requirement for companies, their only requirement being the need to present some additional information required by law and guarantee the minimum percentage of 25% of their outstanding shares. The Level 2 and New Market segments are similar segments, their main difference being the need for companies to offer their preferred shares, with voting power in situations of greater complexity, such as in the case of mergers and acquisitions.

Table II: Regression results.

This table presents the results of the model:

$$CAR_{Year} = \beta_0 + \beta_1 CAR\,Voluntary_{it} + \beta_2 Governance_{it} + \beta_3 CAR\,Voluntary \quad . \quad Governance$$
$$+ \beta_4 CAR\,Mandatory_{it} + \sum Controls + \varepsilon$$

CAR_Year	Coefficient	P>|t|
CAR_Voluntary	1,15	**0,03
Governance	3,05	**0,02
CAR_Vol.Gov	-0,38	0,49
CAR_Mandatory	1,72	*0,00
Equity Liquidity	0,38	0,79
Profitability - ROA	-3,0	0,61
Indebtedness	-0,51	0,72
Size	0,02	0,97
Book-to-Market	0,43	0,01**
Volatility	4,17	0,52
Observations	867	
Prob > chi2	0,000	
R2	20%	
VIF	5	

Source: Elaborated by the author.
Note 1: The Table presents the coefficient, P-Value and its significance, considering the levels of 10% (***), 5% (**) and 1% (*). In this sense, for variables with a p-value greater than 0.1, they were not considered significant.
Note 2: CAR_Year (RA Accumulated) was tested in the disclosure windows of voluntary disclosures, specifically for the category Notice to the Market and subsequently, compared with the average return of shares on the other days of the base period, using the average of shares per company / year (rangestart), in the window / date range (-1 and +1), using the Market Value-Weight Return method. The results were statistically significant for the days when voluntary disclosures occurred and, consequently, the companies presented an abnormal average return on their share price.

Based on the analysis in Table 2, a P-Value of 0.03 was found for the beta coefficient of the independent variable CAR_Voluntary, with a result of less than 5% of significance, but with an average confidence level of 95%. Thus, it was found that the informational content disclosed by the companies listed in the base period, specifically for the category Notice to the Market, brought relevant information to the market and it reacted differently, and thus presented

an AR for the companies' shares. open. Therefore, for each 1% of the disclosed DV, there is an abnormal average return on the share prices of the listed companies of 1.15, which indicates the non-rejection of hypothesis 01 of the survey.

This result corroborates with the results of Chung et al. (2017), in which they highlighted that the DV promotes an effect on the market reaction, based on the relevance of the informational content, on the share price of the listed companies. This, due to the fact that the DV contributes to the reduction of informational asymmetry, which reduces possible uncertainties for investors.

Regarding the independent variable GC, there was a P-Value of 0.02, that is, with a significance level of 5% and within an average of 95% of the confidence level of the results. Thus, the results indicate that the companies listed at differentiated levels of GC obtained abnormal accumulated returns in their share price during the base period. This occurred, due to the different levels of KM promoting better management techniques, greater transparency with its shareholders, in addition to complying with obligations that go beyond the recommendations contained in the Brazilian corporate law, which corroborates the results of the research ofLanzana et al. (2006). This result validates hypothesis 02 of the research.

However, the results showed a P-Value of 0.49 for the independent variable CAR_Vol.Gov, with no levels of significance and confidence in the results, and with a negative coefficient. From the point of view of the relevance of the informational content, during the base period, it is concluded that companies listed in the different levels of KM are not essentially related to the companies that promote the DV. This result rejects hypothesis 03 of the research.

5. Final Considerations

The present research aimed to analyze the market reaction regarding the relevance of the informational content that DV (specifically for the Notice to the Market category) produces through the accumulated RA of the shares of Brazilian companies listed on B3 and segmented at differentiated levels of GC .

In this sense, from the results on the relevance of the informational content disclosed, influenced by the differentiated GC levels of the companies listed on the Brazilian stock exchange during the period from 2010 to 2019. It was verified through the results that the accumulated abnormal returns, they are related to the voluntary disclosure of informational content promoted by the listed companies, as shown in Table 1. In which there is evidence of a different reaction from the market, as the companies studied in this research presented an accumulated AR in the average price of their shares.

In short, the results in this work presented that the voluntary disclosure of relevant information positively affects the abnormal accumulated return of the share price and changes investors' perception of the market value of companies listed on the Brazilian stock exchange. Together with the mandatory disclosure of information, the results of the works already mentioned are complemented (La Porta et al., 1998; Cheng et al., 2016). This, because they promote a reduction of informational asymmetry, reduces the risks of operations, and generates greater transparency for investors of the companies segmented in the different levels of corporate governance of the Brazilian stock exchange (Lanzana, et al., 2006; Chung et al., 2017).

The results of this research become relevant to the literature by providing empirical evidence about the positive effect that the DV has on the RA of the companies segmented at differentiated levels of KM. As a practical contribution, this research is of interest to the Brazilian capital market, since it empirically evidences the perception of investors in the market, when they react differently about the disclosure of relevant informational content, through the DV, related to the communicated category to the market, which shows its effect on

the accumulated AR of the shares of Brazilian companies listed on B3 and segmented at differentiated levels of GC.

Finally, when considering that this study used the variable DV from the point of view of the relevance of informational content, specifically only for the category communicated to the market. It is suggested that for the next research be done using the other categories, to check the signs of relevance of the informational content disclosed by publicly-held companies and with different levels of KM, identifying whether they promote an AR in their share price, the results can be compared with the evidence of this research.

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