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LEVEL OF DISCLOSURE IN SUSTAINABILITY REPORTS IN COMPLIANCE WITH GLOBAL REPORTING INITIATIVE (GRI)

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ABSTRACT

The objective of the study is to analyze the level of disclosure in the sustainability reports in compliance with the Global Reporting Initiative (GRI) in the companies listed on the BM&FBovespa. In this sense, a descriptive research was carried out with procedures of documentary collection and quantitative approach. The sample analyzed was composed of 93 companies listed on the BM&FBovespa, which published the sustainability report in 2014 in compliance with the GRI model. The results show that to the extent that there is more complexity in the information that comprises the groups of indicators presented in the sustainability reports, it reduces the level of disclosure by companies. Regarding the level of disclosure, it is noticed that the largest group of companies is concentrated with low disclosure, representing around 30% of the analyzed companies, attending up to 50 items out of the 150 that the report proposes. As for the economic sector, public utility presented a higher level of disclosure in sustainability reports in compliance with the GRI model. It is concluded that, although there has been an increase in the dissemination of sustainability reports, companies still need adaptation to meet the GRI indicators, improving the quality of the reports disseminated and increasing the transparency of the various stakeholders.

Keywords: Social and environmental responsibility. Sustainability reports. GRI.

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1 INTRODUCTION

The environmental responsibility of productive organizations is being discussed intensely recently and a part of society has become more demanding with the origin and sustainability of the products. In addition, companies have been asked about their responsibility for the use of natural resources and the environmental impacts of their activities.

Environmental problems such as climate change, resource depletion, water scarcity and air pollution, among others, have a major impact on the Earth and its inhabitants. All these factors have led the population to become aware of the importance of natural resources to reverse the process of environmental degradation (Sartori, Ensslin, Campo & Ensslin, 2014).

Social and environmental responsibility is understood as a set of actions focused on the management strategy of companies, aiming at their commitment to natural resources and at the same time contributing to economic development. The technological advance allowed the emergence of mechanisms capable of inserting social and environmental information into the management process of companies. They comprise an artifact of competitiveness in the segment of performance (Lima, Cunha, Morreira, & Porte, 2012).

The movements in favor of sustainability have made social and environmental responsibilities more prominent in recent times, generating greater concern in the various areas of knowledge. These areas started to work on the subject observing the involvement of the whole society, seeking solutions that do not harm the environment (Martins, Quintana, Jacques, & Machado, 2013).

The development of environmental management is an important step, as it leads companies to sustainable practices and to guarantee a better quality of life for society. Disclosure of environmental management through reports provides a competitive advantage, since it demonstrates the activities that the company undertakes and is fundamental so that its image before society is not neglected (Bauer & Naime, 2012).

Due to the needs of companies to demonstrate concern about natural resources and the effects that their activities have on the environment, the commitment to transparency and social and environmental responsibility has become essential to avoid waste and degradation. Disclosure reports become important tools for informing society and other stakeholders about the responsibility and awareness of natural resource management and its rational use. Thus, proper accounting for these records has become necessary (Freitas & Oleiro, 2011).

Reports that record social and environmental responsibilities generate transparency in the execution of their activities demonstrate greater involvement of the company with society; provide benefits for the community in general and for the natural resources that will be preserved (Mazzioni, Di Domenico, & Zanin, 2010).

For the users, the reports function as a mechanism for evaluating the practices developed in society. The social and environmental information disclosed enables to construct instruments capable of measuring and controlling the consequences, such as the costs and benefits derived from the social and environmental actions carried out by the company (Holanda, Cardoso, Oliveira, & Luca, 2012).

From the context presented, it is intended to respond to the following research problem: What is the level of disclosure in sustainability reports in compliance with the Global Reporting Initiative (GRI)? The objective of the study is to analyze the level of disclosure in sustainability reports in compliance with the Global Reporting Initiative (GRI). They were considered as specific objectives: (i) To identify the level of disclosure in each group of indicators suggested by the GRI; (ii) To analyze the disclosure of companies, segregating them into groups according to the level of disclosure and by economic sector of performance; (iii) To evaluate the capacity of different levels of corporate governance to influence social and environmental disclosure; (iv) To verify the existence of explanatory factors for the level of disclosure observed in the sample investigated.

The study demonstrates how companies are disclosing environmental, social and economic practices in their management and how this information is presented to stakeholders. The most complete artifact for the disclosure is the report proposed by the GRI, which serves as an aid tool for decision making, standardization of information and comparability.

The importance of the study is justified, due to the growing concern of society with the preservation of the environment. This is one of the reasons why companies need to innovate and invest in sustainable practices to ensure the credibility of consumers, investors and, above all, society itself. Therefore, it is necessary for companies to disseminate environmental and social practices, as well as management of the environmental impacts caused (Di Domenico, Mazzioni, Gubiani, Kronbauer, & Vilani, 2015). Environmental management is important as a tool for market differentiation, as it demonstrates the concern with natural resources, the negative effects on society, and the concern with the perenniality of the entity.

Proper disclosure of social and environmental practices can add value to organizations, as it not only promotes information transparency, but also improves communication and reduces discrepancy with its counterparts. Disclosure is an important tool for internal management and control. It establishes standards of environmental documents, in addition to include an organizational strategy (Rosa, Ensslin, Ensslin & Lunkes, 2011). The GRI is the most widely used model, helping companies to understand and communicate the impacts caused to the environment in a transparent way to their users (*Global Reporting Initiative* [GRI], 2015).

In addition to the introduction, the study presents four more sections. Section two addresses the literature review, which is divided into three subsections: environmental sustainability, environmental disclosure, and related studies. Section three presents the methodological procedures; section four demonstrates the analysis of results and section five outlines the conclusions and future researches.

2 REVIEW OF THE LITERATURE

The social and environmental sustainability grant demonstrates the commitment of companies to the environment and society. The subsection of environmental sustainability demonstrates the concepts around environmental management and its impacts on the environment. The subsection of environmental disclosure addresses the importance of dissemination of practices developed by companies and the impact of their image before society. And finally, the subsection of related studies presents results obtained in similar researches.

2.1 Social and environmental sustainability

Environmental sustainability refers to innovative ways of reducing impacts to the environment through activities that do not harm natural resources and benefit their conservation. The word sustainability is usually related to the environment, but also encompasses social and economic aspects, which, interlinked, seek balance over time (Nogueira & Faria, 2012).

Medeiros, Souza, Franzin, Almeida e Souza (2013) understand environmental sustainability as the process of company development, without affecting the natural resources existing in the place and that in no way can generate scarcity and extinction, aggravating imbalance or promoting aggressions of the essentiality of preservation of life.

Sustainability is measured by the company's ability to move natural resources in an innovative way, without harming existing resources, seeking alternative materials that do not impact on their costs and preserve the environment (Tomé & Bresciani, 2015).

Sustainability is characterized by efficient, responsible and sustainable management that generates benefits for all stakeholders, who use their resources or invests financially to avoid negative environmental damage and preserve it properly, which works with a good operation of the preservation of the environment (Holanda *et al*., 2012).

In this way, sustainability makes it possible to guarantee, preserve, conserve and secure natural resources over a long period of time. It satisfies the present needs of living beings and provides a continuation of the future needs of the next generations (Pereira, Pereira, Monteiro, & Paixão, 2015).

On the other hand, social responsibility makes the company rethink its institutional mission and how to conduct its corporate business, seeking to remain in the globalized market, in which we work with ethical, transparent and responsible position in the activities carried out. Company with social responsibility is the one that offers its products and services thinking about the preservation of the environment and sustainable development, not only complying with the laws, but acting in the best way, prioritizing information for quality management (Holanda *et al*., 2012).

Seeking to eliminate the negative effects of economic growth on nature, sustainability is linked to the preservation of natural resources and self-regulation of the consumption of these resources. Its main objective is to improve the quality of life and to use renewable resources properly (Siche, Agostinho, Ortega, & Romeiro, 2007).

The term sustainability has undergone constant evolution. It gained interpretation in the economic environment, that is, it is not only to guarantee environmental resources for future generations to survive, but to act in a way to control the damages that occur with its degradation, to make companies to promote environmental preservation, applying its wealth in a fair way to achieve its economic efficiency (Bauer & Naime, 2012).

Sustainability reflects a policy of economic and social development, without causing damage to the environment and its natural resources. The quality of conservation and continuity depends on human activities. Such development requires the preservation of global equilibrium. It reflects on socioeconomic effects. Society needs to avoid waste and depletion of natural reserves (Rodrigues & Duarte, 2011). Sustainability is the way to meet human needs without harming the future of the next generations (Santos, 2014).

The vision of society and customers has been changing. It begins to evaluate and criticize the degradation that occurs in the environment, caused by the companies. If well employed, sustainability can become strategic for the company. It can lower its costs by reusing materials, increasing its sales, and winning customers who opt for sustainable companies. This concern of the society and customers with the sustainability tends to generate changes in better quality of life of the future generations (Scarpin, Walter, Mondini, & Roncon, 2013).

Companies began to focus on sustainability. They work on social, environmental and economic issues, play an important role as agents involved in sustainable development, create strategies for contribution and satisfaction of sustainability (Nobre & Ribeiro, 2013).

Seek improvements in the productive sector aimed at the preservation of natural resources is also constant, observing actions to recover the environment that has been degraded with its activities and developing environmental education for employees, third parties and the community in general (Freitas & Oleiro, 2011).

The adoption of social and environmental management influences employees and consumers regarding the preservation of environmental resources and how to maintain these resources for future generations with sustainable quality of life, guaranteeing the well-being of society as a whole (Freitas & Oleiro, 2011).

Companies have the need to implement environmental policies to reduce or eliminate environmental aggression, which is caused by the activities carried out. But this is not just about environmental policy practices. It is necessary to disseminate this information to society, reporting the impacts, objectives and goals they intend to achieve. The relationship between the company and society must be transparent. It should show the actual situation that the activities exert in the environment. It must ascertain when any problem occurs, avoiding to generate risks, pressures or judgments on the part of the society (Carneiro, De Luca, & Oliveira, 2008).

Companies that worked exclusively with financial reports came to realize the importance of drawing up sustainability reports, to make public their vision, challenges and social, environmental and economic results, and thus enable interaction with society (Mazzioni, Di Domenico, & Zanin, 2010). The most common way to report sustainability information is through the specific reports. Although these types of reports assume different titles, they relate to the same theme (Carreira & Palma, 2012).

Sustainability practices are being used not only by companies, but by society, which is constantly seeking the best quality of life. These practices avoid harmful effects caused to the environment, bring innovations of reuse, as they reduce the aggressions and preserve the natural resources. Therefore, sustainable practices and the preparation of environmental conservation reports are necessary.

2.2 Social and environmental disclosure

Companies have been reporting social and environmental disclosure reports, not only for their interest in complying with the standards, but also to preserve their image and demonstrate transparency, providing effective information for different users.

Social and environmental disclosure is a means used by companies to meet the demands of the international community, necessary to generate information to governments, shareholders, administrators, employees, among other users. This information is available on websites and in annual company reports (Silva, Vicente, Pfitscher, & Rosa, 2013).

In Brazil, although companies report sustainability reports, their process is still embryonic, as there is a lack of adequacy in the accounting aspect. This creates a deficiency in disclosure and prevents the company from better managing its environmental issues. In addition, it deprives users of information that can help them get to know the company in greater depth (Carneiro, De Luca, & Oliveira, 2008).

Thus, there is no legislation in Brazil that obliges companies to disseminate statements of environmental and social practices. The companies that voluntarily disclosure their sustainability reports are visible (Di Domenico & Lavarda, 2013).

The company has the option to disseminate certain information, which is not required by law. In this way, each company acts according to the view of its managers. They can provide users with enough information to understand the activities and their risks (Beuren, Nascimento, & Rocha, 2013). The information disclosed voluntarily shows that companies are concerned with improvements and maintenance of results (Borges, Rosa, & Ensslin, 2010).

Voluntary dissemination means that there is no legal obligation to disseminate environmental information in the company's reports during the years, but it is not an easy task for managers to choose what information to make available. The lack of any of the information may lead to questions regarding the way to control environmental and social issues, directly and indirectly affect the entity's business. The society will only be aware of environmental information if the company is committed to the transparency and veracity of the facts that occur (Boff & Beuren, 2012).

Concern about social and environmental issues and the dissemination of this information interfere with organizations as an ethical attitude. Companies need to detail their performance to users and disseminate information with transparency. If they do not do so, they may harm the continuity of the company, causing losses in the market for the others, which demonstrate environmental aspects in their reports (Pereira, Carvalho, & Parente, 2011).

For the disclosure to be efficient information, it is necessary that the company's management and performance be revealed. These aspects include information on balance sheets, result, emissions, social and environmental, consumption of natural resources, among others, that must be demonstrated in its reports. The lack of such information could lead to market loss and credibility (Rosa *et al*., 2011).

The lack of standardization in sustainability reports opens up a space for companies to freely choose the type of report for the use of social and environmental disclosure resulting from productive activities (Cavalcanti, Almeida, Almeida, & Limeira, 2009). In order to respond to society, companies need instruments to disseminate their information, activities developed and how it affects the environment. This information will be demonstrated, through reports, to determine if the company has financial conditions to ensure longevity without destroying the environment (Guimarães, Rech, Cunha, & Pereira, 2014).

The most widely used report today is the Global Reporting Initiative (GRI), which has an international standard and helps organizations understand and communicate the company's impacts on sustainable issues. GRI model reports use standardized information norms, describe economic, environmental and social impacts. In addition, they increase both the comparability and the quality of the information available to the stakeholders, allowing a better decision between the relationship between the company's activities and its impact on sustainable development (GRI, 2015).

The GRI is an international organization with the mission of developing and disseminating sustainability reports. This organization helps to understand and communicate environmental impacts. It contributes to the standardization of information and verifies compliance with the reports presented by the companies (GRI 2016).

With the growing concern of society with the environment, sustainability reports serve as tools to support decision-making, as well as showing concern about the negative effects of its activities on natural resources. Therefore, it is necessary to disclosure in the reports the environmental performance, show concern and guarantee a better quality of life for future generations.

2.3 Related studies

This topic presents related studies, with similar approaches, which demonstrate how companies have disclosed environmental issues and their concern about resource degradation in their reports.

Beuren *et al.* (2013) verified the relationship between the level of environmental disclosure and the economic performance of open corporations classified in Guia Você S/A - Best Companies for You to Work For. The results of the research show that: a) in the categorization of the environmental disclosure, 680 information was disclosed, distributed in 99 complete information, 126 incomplete information and 455 missing information; b) at the level of environmental disclosure score, 55% of the companies received insufficient concept, 35% regular and 9% good, and c) the relationship between the level of environmental disclosure and the economic performance of the companies showed a weak correlation. It was concluded that, using the Data Envelopment Analysis (DEA) methodology, it was concluded that not all companies that presented a higher level of disclosure of environmental information obtained efficient economic performance.

Beuren, Di Domenico e Cordeiro (2013) investigated the behavior of Environmental Management Accounting (EMA) indicators, as evidenced by the Global Reporting Initiative (GRI) of pulp and paper companies listed on BM&FBovespa. The results show that Suzano Papel e Celulose S.A. presented efficiency throughout the period, comparing the volume of material resources, water and energy consumed and the volume of production generated. Klabin S.A. gained efficiency in the period, particularly as of 2008. Celulose Irani S.A. decreased its efficiency in 2008 and 2009 and recovered in 2010. They concluded that the physical indicators of the EMA, disclosed in the GRI from 2006 to 2010, indicate that these companies have been seeking greater efficiency in the use of natural resources, which is important to ensure the future of the next generations.

Miranda and Malaquias (2013) analyzed the level of environmental disclosure provided by Brazilian open corporations in their financial statements. The results showed that the level of environmental disclosure increased over time. By means of the correlation analysis, it was verified that the variable size presented a positive and moderate correlation with the levels of disclosure of 2005 and 2010. Through the Student Test, it was possible to verify if the entities of regulated sectors disclose more environmental information of the than those in non-regulated sectors. The results showed that companies in the regulated sectors expose more environmental information than those belonging to the non-regulated sectors. Then, the analysis of variance was carried out. It can be verified that the level of corporate governance is not directly related to the levels of disclosure.

Santos, Silva, Lorandi (2014) examined the level of environmental disclosure of the companies listed on the BM&FBovespa, belonging to the electric energy segment. It was identified that among the 65 companies listed in this segment, 75% (49 companies) disseminated the social and environmental report corresponding to 2011. The National Electric Energy Agency (ANEEL) directs companies to publish the social report (IBASE model) within the social and environmental reports. However, it was verified that only 49 companies of the sample disseminated it. The results of the research indicated that 34 companies disclosed 90% or more of the analyzed items, 28 of them described all in the reports. It was concluded that the intervention of the regulatory body boosts companies in the Brazilian electricity sector to be accountable to society, considering that natural resources are essential for the operationalization of the activities carried out.

Di Domenico et al. (2016) identify the determinants of the level of disclosure in sustainability reports, in compliance with the Global Reporting Initiative (GRI), in the companies listed on the BM&FBovespa. The results show that, as there is more complexity in the items that comprise the groups of indicators of sustainability reports in compliance with the GRI model, the level of disclosure of companies is reduced. The public utility sector presented a higher level of disclosure in sustainability reports in compliance with the GRI model. The determinants for the level of disclosure were: wealth generated, net margin, return on shareholders' equity and return on assets.

The results of the researches showed that the companies have assumed a concern with the environment. They introduced the environmental disclosure in their reports, even though they still lacked adaptations. Companies seek to improve transparency and results year after year to meet stakeholder expectations. They should therefore provide information that will benefit their image before the market and ensure a better quality of life for the next generations.

3 METHODOLOGICAL PROCEDURES

In this section, the methods and procedures used to conduct the research are presented. As for the objectives, the study is characterized as descriptive, because its deepening is based on the analysis of the informational characteristics of the sustainability reports of the companies listed on BM&FBovespa. Regarding the procedures, the research was based on the documentary analysis, for examining the sustainability reports of the companies composing the sample. And as for the approach to the problem, it is quantitative, by the use of statistical techniques for analysis and interpretation of the data.

The research population was composed of 757 companies listed on the BM&FBovespa and the sample includes 93 companies that disseminated the sustainability report in 2014, based on the GRI model. Financial companies were excluded because accounting and financial policies, corporate strategies and the way of operating have different characteristics from other organizations.

The data collection instrument was constructed by means of a check list in accordance with the requirements of the international model GRI version G4, composed of 150 indicators, divided into 13 groups. The analysis considered some characteristics of the companies analyzed, in order to verify the existence of differences in the level of disclosure, as shown in Figure 1.

VARIABLE	METRIC	SOURCE
Social and environmental disclosure	Total points obtained in relation to GRI 4's total social and environmental indicators. 1 is assigned to the information fully disclosed; 0.5 to partially disclosed information; and 0 to the information not disclosed.	Annual and/or sustainability reports, GRI model.
Corporate governance	Group 1 = companies of the traditional group; Group 2 = companies listed in the IGCX	BM&FBovespa
Indebtedness	Group 1 = companies with indebtedness below the median; Group 2 = companies with indebtedness above the median;	Economatica
Concentration of ownership	Group 1 = companies with concentration below the median; Group 2 = companies with concentration above the median;	Economatica
Audit committee	Group 1 = companies that do not have an audit committee; Group 2 = companies that have an audit committee;	BM&FBovespa
Presence of institutional investor	Group 1 = companies in which institutional investors hold up to 5% shareholding; Group 2 = companies with institutional investors whose shareholding is more than 5%;	BM&FBovespa
Internationalization of companies	Group 1 = companies that do not have ADR's issuance; Group 2 = companies that have ADR's issuance;	BM&FBovespa
Size	Group 1 = companies with size below the median; Group 2 = companies with size above median;	Economatica

Figure 1. Study variables
Source: Prepared by the authors.

Figure 1 presents the main characteristics studied in relation to the disseminate of sustainability reports, in which the dependent variable used is composed of the indicators proposed by the GRI and the independent variables refer to the organizational characteristics.

For the data analysis, were used: (i) descriptive statistics measures, to identify the performance of the companies investigated regarding social and environmental disclosure levels; (ii) Kolmogorov-Smirnov (KS) test to verify the normality of the data; (iii) Levene test to verify equality of variances; (iv) t test for equality of means and ANOVA test to identify the existence of differences in the disclosure of information from the different business characteristics. The analyzes were developed using the Statistical Package for the Social Sciences (SPSS®).

4 ANALYSIS AND INTERPRETATION OF RESULTS

This section presents the level of disclosure of the indicators proposed by the Global Reporting Initiative (GRI) in the sustainability reports of the companies listed on the BM&FBovespa. The GRI allows the extraction of data from environmental disclosure of companies, generating relevant information for users, improving environmental performance management and assisting decision making in identifying practices that can be improved.

In order to meet the specific objective of identifying the level of disclosure in each group of indicators suggested by the GRI, the consolidated results are presented in Graph 1. The subdivision is given in thirteen groups: strategy and analysis; organizational profile; material aspects and limits; stakeholder engagement; report profile, governance; ethics and integrity; economic performance; environmental performance; social performance; human rights; society and responsibility for the product.

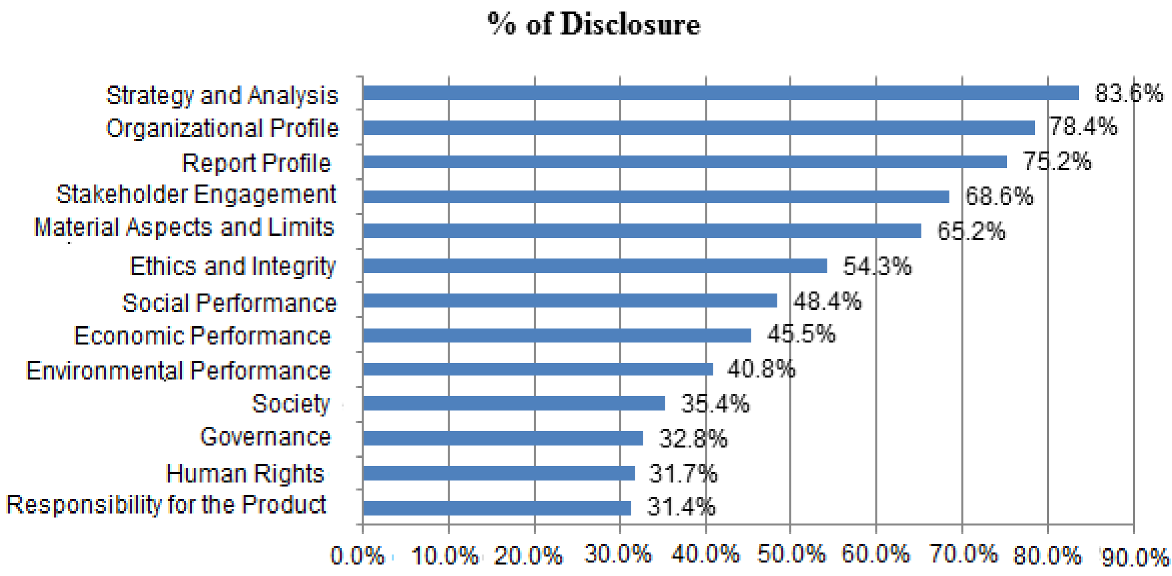

Figure 2. Social and environmental level of evidence by group of indicators
Source: Research data.

Figure 2 shows that the groups of indicators that presented a higher level of disclosure are: strategy and analysis (83.6%), organizational profile (78.4%) and report profile (75.2%). A possible explanation for the high level of disclosure is related to the character of cadastral information, such as the name of the organization, main products/services, location of the headquarters, countries in which it operates, markets of performance, size of the organization, relevance of sustainability, main impacts, risks and opportunities, period covered by the report, date of previous report, issue cycle and contact data.

Subsequently, the stakeholder engagement indicator groups (68.6%), material aspects and limits (65.2%) and ethics and integrity (54.3%) emphasize. The level of disclosure may be related to the low complexity of the information, including the disseminate of the process adopted to define the content of the report, the limit inside and outside the organization, aspects of identified materials, stakeholder groups engaged in the organization, basis for identification, selection and approach of the organization to engage stakeholders, principles, values, behavioral norms and how organizations communicate concerns about unethical or incompatible behaviors with legislation.

The other indicators, such as social performance, economic performance, environmental performance, society, governance, human rights and responsibility for the product presented a low level of disclosure, with a mean below 50%. In this way, it can be seen that companies partially disclose social and environmental information, which indicates the need to expand these practices that indicate the social commitment of companies.

The groups of indicators of social performance, human rights, society and responsibility for the product detail the impacts of the organization on the social systems in which they operate. They cover information on employment, labor practices, health and safety at work, training and education, diversity and equal opportunities, freedom of association and collective bargaining, supplier assessment, impact on corruption, public policies, unfair competition, customer safety and health, customer privacy and compliance with laws and regulations.

The group of economic performance indicators addresses the impacts of the organization on the economic conditions of the stakeholders and the local, national and global economic system. The group of environmental performance indicators demonstrates the organization's impacts on the ecosystem, including soil, air and water. On the other hand, governance presents its structure and composition, the role played by the highest governance body in defining the organization's purpose, values and strategy, risk management and in the preparation of sustainability reports. The result indicates that companies are not going into environmental, social, governance, human rights and responsibility for the product issues, which harms the results of reports and signals to users of information fragilities in social commitment

Compared with the study by Di Domenico, Dal Magro, Mazzioni, Preis and Klann (2016), issues related to human rights, environmental performance and responsibility for the product present low disclosure. They show how companies are not going into these issues and partially report to the extent that information is more complex. In the study by Beuren et al. (2013), the environmental disclosure presented information in its incomplete predominance. They corroborate the low level of disclosure by companies.

In general, it can be inferred from Graph 1 that the greater the complexity in the items that comprise the groups of indicators presented in the sustainability reports in compliance with the GRI model, the lower the level of disclosure by the companies, the more complex the information, the greater the likelihood of full dissemination not occurring.

However, the number of companies that use sustainability reports is increasing, although the information is presented in a partial way with regard to GRI model indicators.

In order to meet the objective of analyzing the disclosure of companies, segregating them into groups according to the level of disclosure and by economic sector of performance, Tables 1 and 2 were elaborated.

Table 1 shows the mean level of disclosure of the companies, according to the distribution to the groups and the number of items disclosed, from the checklist elaborated in compliance with the GRI model. The checklist included 150 items. For each company studied, a score of 0 to 150 was assigned.

Then, the companies were grouped according to the score obtained, obeying the following scales of disclosure: Group 1 - from 0 to 50 items met (low), Group 2 - from 51 to 75 items met (mean), Group 3 - from 76 to 100 items met (high) and Group 4 - above 100 items met (higher).

Table 1
Disclosure of indicators by groups of companies

Disclosure Level	Nº of Companies	% mean of companies	Mean nº of items disclosed
Group 1	28	30.11%	33
Group 2	27	29.03%	64
Group 3	24	25.81%	89
Group 4	14	15.05%	123

Note. Source: Research data.

Table 1 shows the disclosure of the indicators by groups of companies. The largest concentration is in Group 1. It represents 30% of the companies analyzed. The number of items met ranges from 0 to 50 of the 150 observed. It represents low disclosure. The results show that companies report lower than compound items in reports. They do not meet the complexity of other indicators.

Group 4 contains the companies that adequately meet the items in the reports, that is, around 15% of the companies analyzed showed an mean of 123 of the 150 observed items. In this way, these companies are working ethically, transparently and responsibly. They are concerned about environmental resources.

These results corroborate those presented by Beuren et al. (2013) that indicate that the information disclosed in the sustainability reports, in their predominance, are absent. They represent an insufficient concept of disclosure and do not meet the criteria required by the GRI model.

Table 2 shows the mean level of general disclosure, segregating companies according to economic sectors.

Table 2
Mean level of disclosure of the 150 indicators of the GRI model in relation to the sectors

Performance Sectors		General Disclosure Level			
		Group 1	Group 2	Group 3	Group 4
Oil, Gas and Biofuel	Percentage	3.57%	3.70%	4.17%	7.14%
	Number	1	1	1	1
Basic Materials	Percentage	7.14%	14.82%	12.50%	14.29%
	Number	2	4	3	2
Industrial Goods	Percentage	7.14%	7.41%	29.17%	14.29%
	Number	2	2	7	2
Non Cyclic Consumption	Percentage	14.30%	18.52%	4.17%	14.29%
	Number	4	5	1	2
Cyclic Consumption	Percentage	35.71%	22.22%	0.00%	7.14%
	Number	10	6	0	1
Health	Percentage	7.14%	3.70%	4.17%	0.00%
	Number	2	1	1	0
Information Technology	Percentage	3.57%	0.00%	0.00%	0.00%
	Number	1	0	0	0
Telecommunications	Percentage	0.00%	7.41%	8.32%	0.00%
	Number	0	2	2	0
Public Utility	Percentage	21.43%	22.22%	37.50%	42.85%
	Number	6	6	9	6
TOTAL	Percentage	**100%**	**100%**	**100%**	**100%**
	Nº of Companies	**28**	**27**	**24**	**14**

Note. Source: Research data.

Table 2 shows the level of disclosure for the economic sectors, divided into four groups: 1 (low disclosure), 2 (moderate disclosure), 3 (high disclosure) and 4 (extensive disclosure). It demonstrates the sectors of action that present greater disclosure and those that need to conform to the requirements of the GRI, providing greater transparency to its stakeholders.

The results presented in Table 2 show that of the 14 companies that disseminated their sustainability reports with superior disclosure, 42.85% are concentrated in the public utility sector; 14.29% in the basic materials sector, non-cyclical consumption and cyclical consumption, respectively. From the 24 companies with a high level of disclosure in sustainability reports, the largest concentration is in the public utility sector (37.50%), consumer sector (29.17%) and basic materials (12.50%). From the 27 companies that presented mean disclosure in sustainability reports, the largest concentration of companies is in the sectors of cyclical consumption and public utility, with (22.22%), respectively. Then, it is the non-cyclical consumption sector (18.52%) and basic materials (14.82%). Finally, from the 28 companies that demonstrated low disclosure in the sustainability reports in compliance with the GRI model, 35.71% are concentrated in the cyclical consumption sector; 21.43% in the public utility; 14.30% in the non-cyclical consumption; 7.14% in basic materials, industrial goods and health and 3.57% in the oil, gas and biofuel and information technology sectors.

The results indicate that the intervention of a regulatory agency boosts public sector companies to disseminate information to society, given that resources are essential for the operationalization of the activities carried out. With this, the public utility sector presents a higher level of disclosure.

The application of the statistical tests observed the results obtained in the Kolmogorov - Smirnov (KS) test for the quantitative variables, namely: concentration of property, indebtedness, size and the index of disclosure, as shown in Table 3.

Table 3
Kolmogorov-Smirnov test for normality of the data

		CONC	END	Ln_TAM	IE
N		93	93	93	93
Normal Parameters	Mean	52.55	0.62	6.85550645	69.9839
	Standard deviation	24.906	0.208	0.634037747	32.49435
Maximum Extreme Differences	Absolutes	0.097	0.086	0.053	0.051
	Positives	0.097	0.086	0.053	0.051
	Negatives	-0.082	-0.046	-0.026	-0.045
Kolmogorov-Smirnov Z		0.940	0.831	0.507	0.488
Asymptotic Significance (2 tails)		0.340	0.495	0.960	0.971

Note. Source: Research data.

From the results of Table 3, the normality of the data is confirmed, it is possible to work with parametric tests to analyze them.

Another objective of the study is to assess whether the capacity of different levels of corporate governance influences social and environmental disclosure. In order to verify the existence of differences in the social and environmental disclosure level in relation to the different levels of corporate governance, the analysis of variance (ANOVA) technique was used with the Tukey test, as shown in Table 4.

Table 4
ANOVA results from the multiple comparisons of the Tukey's test according to the NGC

(I) NDGC	(J) NDGC	Mean Difference (I-J)	Standard Model	Significance	Confidence Interval 95%	
					Lower limit	Upper limit
1	2	-9.86979	11.02661	0.807	-38.7401	19.0005
	3	-7.07813	12.87631	0.946	-40.7914	26.6352
	4	-12.03239	7.68380	0.403	-32.1504	8.0856
2	1	9.86979	11.02661	0.807	-19.0005	38.7401
	3	2.79167	14.86828	0.998	-36.1371	41.7204
	4	-2.16260	10.69145	0.997	-30.1554	25.8302
3	1	7.07813	12.87631	0.946	-26.6352	40.7914
	2	-2.79167	14.86828	0.998	-41.7204	36.1371
	4	-4.95427	12.59048	0.979	-37.9192	28.0107
4	1	12.03239	7.68380	0.403	-8.0856	32.1504
	2	2.16260	10.69145	0.997	-25.8302	30.1554
	3	4.95427	12.59048	0.979	-28.0107	37.9192

Note. Source: Research data.

In the analysis of Table 4, the companies were segregated into four groups: 1 - companies with level 1 of governance; 2 - companies with level 2 of governance; 3 - companies in the new market; 4 - traditional market companies.

The result obtained with ANOVA, based on the multiple comparisons of the Tukey test, shows that there are no significant differences in the disclosure index and levels of corporate governance. The BM&FBovespa listed companies that voluntarily adhere to corporate governance levels tend to disseminate more information that goes beyond rules and disclosure requirements.

The study by Gallon, Beuren and Hein (2007) presented a relationship between the degree of disclosure and the level of corporate governance. In contrast, Gonçalves, Weffort, Peleias e Gonçalves (2008) and Cong and Freedman (2011) show that the level of corporate governance does not seem to influence the relationship.

To verify the existence of explanatory factors for the level of disclosure, observed in the investigated sample, parametric tests were used. From the normality in the distribution of the quantitative variables data, verified through the K-S test (Table 3), the Levene test for equality of variances and the t-test for equality of means were used. The results are shown in Table 5 and Table 6.

Initially, Table 5 presents the disclosure statistics for each segregation of group of business characteristics, described in Table 1.

Table 5
Group Statistics

Characteristics	Group	N	Mean	Standard deviation	Standard error of the mean
COM_AUDIT	1	26	62.3654	31.86363	6.24897
	2	67	72.9403	32.48875	3.96913
INV_INST	1	41	75.5122	31.06254	4.85115
	2	52	65.6250	33.22677	4.60772
INTER	1	63	72.3333	33.00440	4.15816
	2	30	65.0500	31.36392	5.72624
NGC	1	32	62.7969	30.90356	5.46303
	2	61	73.7541	32.91791	4.21471
CONC	1	46	71.3478	33.43748	4.93009
	2	47	68.6489	31.84847	4.64558
END	1	46	68.1630	33.79334	4.98256
	2	47	71.7660	31.43313	4.58499
TAM	1	46	65.7391	34.74090	5.12227
	2	47	74.1383	29.92358	4.36480

Note. Source: Research data.

The results presented in Table 5 indicate that companies with an audit committee, which do not have an institutional investor, which do not have ADRs, with a differentiated level of corporate governance, with a higher concentration of capital, with a higher level of indebtedness and with higher values of assets presented higher levels of disclosure.

The verification of the existence of statistical significance in the mean differences found in Table 5 was carried out from the Levene test (to verify the equality of variances), followed by the t test for independent samples, as presented in Table 6, using the emphasized business characteristics in Table 1. When the Levene test is shown to be statistically significant (<0.05), equal variances should be considered as non-assumed. Otherwise, consider the equal variances assumed.

The results obtained did not allow identifying any significant differences between the groups of companies constituted according to the defined criteria. One possible explanation for the results is that the concern with environmental disclosure is at a similar level of consideration, regardless of the operational characteristics of the companies.

Table 6
Levene test and t-test of means

		Levene test for equality of variances		t-test for equality of means		
Characteristics		F	Significance	T	df	Sig.
COM_AUDIT	Equal variances assumed	0.049	0.826	-1.416	91	0.160
	Equal variances not assumed			-1.428	46.381	0.160
INV_INST	Equal variances assumed	0.171	0.680	1.466	91	0.146
	Equal variances not assumed			1.478	88.338	0.143
INTER	Equal variances assumed	0.373	0.543	1.011	91	0.315
	Equal variances not assumed			1.029	59.862	0.308

Continue

Table 6 (continuation)

Characteristics		Levene test for equality of variances		t-test for equality of means		
		F	Significance	T	df	Sig.
NGC	Equal variances assumed	0.180	0.672	-1.557	91	0.123
	Equal variances not assumed			-1.588	66.680	0.117
CONC	Equal variances assumed	0.072	0.789	0.399	91	0.691
	Equal variances not assumed			0.398	90.552	0.691
END	Equal variances assumed	0.592	0.444	-0.533	91	0.596
	Equal variances not assumed			-0.532	90.204	0.596
TAM	Equal variances assumed	1.561	0.215	-1.250	91	0.214
	Equal variances not assumed			-1.248	88.454	0.215

Note. Source: Research data.

Based on the analyzes carried out, it is noted that although the number of companies that disseminate sustainability reports has increased over the years, companies are partially disseminating the information in their sustainability reports. They disclose cadastral information and fail to present more complex information. They harm the result of the report and its relevance before the users.

The social and environmental reports have an important condition to improve the image of the companies before the society, based on the information proposed by the models. However, it is relevant to disseminate not only cadastral information, but also to cover more complex information. Companies need to be aware of and adopt sustainable practices, act in a way to control damages to the environment and guarantee environmental resources for future generations.

5 CONCLUSION

The study aimed to analyze the level of disclosure in sustainability reports in compliance with the Global Reporting Initiative (GRI). In this way, the research is characterized as descriptive, with documental and quantitative analysis. It was developed in a sample of 93 companies listed on BM&FBovespa that disseminated the sustainability report in 2014, based on the GRI model.

The results pointed out by the study allow us to conclude that to the extent that there is more complexity in the information that comprises the groups of indicators presented in the sustainability reports in compliance with the GRI, the level of disclosure by the companies is reduced. Thus, the complexity of the information of an item is related to the possibility of not disseminating such data, while more conventional indicators (such as cadastral data) are disclosed with success due to the ease of dissemination of the data.

Regarding the level of disclosure of indicators by groups of companies, it is noticed that a large part of it discloses of inferior mode items composed in the sustainability reports. They do not meet all the indicators. On the other hand, there are companies that disclose voluntarily and with quality indicators in the reports. They demonstrate their concern for the environment and work ethically, transparently and responsibly.

Contrary to expectations, higher levels of corporate governance did not conduct companies to higher levels of social and environmental disclosure. Regarding the sector of activity, it was observed that the regulated companies, predominantly of the public utility sector, boosted the level of disclosure in compliance with the GRI model, constituting a factor of distinction. It is observed that the analysis of the disclosure by sector was carried out only in descriptive terms, since the number of companies by group and by sector did not allow an inferential analysis.

The disclosure of sustainability reports is important for organizations, since it allows building credibility, trust and transparency to stakeholders, as well as demonstrating their concern for natural resources. Although the number of companies with the available report has grown compared to previous studies, the information is still presented in a partial way; it does not cover all the composite indicators in the GRI model.

The results presented signs that the larger companies, with an audit committee, which do not have an institutional investor, do not have ADR's issuance, with a differentiated level of corporate governance, with a higher concentration of capital and with a higher level of indebtedness, presented higher levels of disclosure. However, the differences for their counterparts were not significant.

Based on the research carried out, it is proposed that new studies be carried out to analyze the performance of environmental indicators in sectors with heavy dependence on the production of natural resources. In addition, other business characteristics can be used to justify the level of disclosure.

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