



**REVISTA AMBIENTE CONTÁBIL**  
Universidade Federal do Rio Grande do Norte  
ISSN 2176-9036

**Vol. 12, n. 2, Jul./Dez. 2020**

Sítios: <http://www.periodicos.ufrn.br/ambiente>

<http://www.atena.org.br/revista/ojs-2.2.3-06/index.php/Ambiente>

Article received: 10/13/2019. Peer reviewed: 12/23/2019.

Reformulated: 01/20/2020. Evaluated by using the double blind review system.

**DOI: 10.21680/2176-9036.2020v12n2ID21526**

**An analysis of the adherence of Brazilian organizations to GRI as a method of disclosure of corporate social responsibility**

**Un análisis de la adhesión de organizaciones brasileñas a la GRI como método de divulgación de información de responsabilidad social corporativa**

**Uma análise da adesão de organizações brasileiras à GRI como método de divulgação de informações de responsabilidade social corporativa**

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### Abstract

**Purpose:** Organizations have published corporate social responsibility reports aimed at spreading their social responsibility. In this sense, the Global Reporting Initiative (GRI) develops structured models of sustainability reports that help organizations design and disseminate them. The objective of this paper is to analyze the evolution of GRI adherence and the quality of CSR reports provided by Brazilian organizations.

**Methodology:** Data for all Brazilian organizations that adhered to GRI, in the period 2000-2017, were collected for a total of 461 organizations and 2,142 observations. Descriptive analyses and tests for the difference in proportions have been processed.

**Results:** The results show that there was a significant increase in the number of Brazilian organizations that joined GRI, with an average annual growth of around 48%. Business organizations are the ones that most disclose social action through GRI, although there are also organizations of other nature. There is a strong predominance of large companies. About the quality of information, it is perceived that about 90% of the statements already follow GRI guidelines, and more than half are not yet subject to an external audit. Although slight, there has been observed a breakthrough in the disclosure of reports that integrate financial and social information.

**Contributions of the Study:** The study about CSR report disclosure in GRI format provides to academic community information on how this disclosure tool has been deemed relevant by business organizations or not in Brazil. The work provides additional contribution by presenting a detailed analysis of GRI reporting disclosure evolution by Brazilian organizations. In addition, the study contributes by pointing out that GRI has been established as an important channel for the dissemination of information on social actions and sustainability for Brazilian organizations. Regarding the academic point of view, the research collaborates in advancing the studies related to voluntary disclosure and in deepening the analysis of the quality of GRI reports drafted by organizations.

**Keywords:** Social Corporate Responsibility. Disclosure. Global Reporting Initiative. Adhesion. Brazil.

### Resumen

**Objetivo:** Las organizaciones han publicado informes de responsabilidad social corporativa para divulgar su responsabilidad social. En este sentido, la *Global Reporting Initiative* (GRI) desarrolla modelos estructurados de informes de sostenibilidad que auxilian a las organizaciones en la elaboración y divulgación de los mismos. El presente trabajo tiene como objetivo analizar la evolución de la adhesión a la GRI y la calidad de los informes presentados sobre las acciones de RSC por organizaciones brasileñas.

**Metodología:** Se recogieron los datos de todas las organizaciones brasileñas que adhirieron a la GRI, en el período 2000-2017, en un total de 461 organizaciones y 2.142 observaciones. Se realizó un análisis descriptivo y pruebas de diferencia de proporción.

**Resultados:** Los resultados muestran que hubo un crecimiento relevante del número de organizaciones brasileñas que adhirieron a la GRI, observándose un crecimiento anual medio en torno al 48%. Las organizaciones empresariales son las que más divulgan acción social vía GRI, aunque también hay organizaciones de otra naturaleza. Se observa un predominio fuerte de grandes empresas. En cuanto a la calidad de la información, se percibe que cerca del 90%

de las demostraciones ya siguen las directrices de la GRI, y más de la mitad aún no es sometida a proceso de auditoría externa. Se observa un avance, aunque pequeño, de la divulgación de informes que integran informaciones financieras y de cuño social.

**Contribuciones del Trabajo:** El estudio sobre el informe de responsabilidad social corporativa en formato GRI proporciona a la comunidad académica información sobre cuanto esta herramienta de divulgación ha sido considerada relevante por las organizaciones empresariales o no en Brasil. Como contribución se tiene el análisis detallada de la evolución de la divulgación de los informes GRI de las organizaciones brasileñas. Además, el estudio contribuye al señalar que la GRI se ha firmado como un importante medio para la divulgación de informaciones de acciones sociales y de sostenibilidad para las organizaciones brasileñas. Desde el punto de vista académico, la investigación colabora avanzando los estudios relacionados con la divulgación voluntaria y profundizando el análisis de la calidad de los informes GRI preparados por las organizaciones.

**Palabras clave:** Responsabilidad Social. Divulgación. *Global Reporting Initiative*. Adhesión. Brasil.

### Resumo

**Objetivo:** As organizações têm publicado relatórios de responsabilidade social corporativa (RSC) visando divulgar sua responsabilidade social. Nesse sentido, a *Global Reporting Initiative* (GRI) desenvolve modelos estruturados de relatórios de sustentabilidade que auxiliam as organizações na sua elaboração e divulgação. O presente trabalho tem como objetivo analisar a evolução da adesão à GRI e a qualidade dos relatórios de RSC divulgados por organizações brasileiras.

**Metodologia:** Coletou-se os dados de todas as organizações brasileiras que aderiram à GRI, no período 2000-2017, num total de 461 organizações e 2.142 observações. Fez-se uma análise descritiva e testes de diferença de proporções.

**Resultados:** Os resultados mostram que houve um crescimento relevante do número de organizações brasileiras que aderiram à GRI, observando-se um crescimento anual médio em torno de 48%. As organizações empresariais são as que mais divulgam ação social via GRI, embora também haja organizações de outra natureza. Verifica-se uma predominância forte de empresas de grande porte. Relativamente à qualidade da informação, percebe-se que cerca de 90% das demonstrações já seguem as diretrizes da GRI, e mais da metade ainda não é submetido a processo de auditoria externa. Observa-se um avanço, mesmo que pequeno, da divulgação de relatórios que integram informações financeiras e de cuño social.

**Contribuições do Estudo:** O estudo sobre o *disclosure* de relatório de RSC no formato GRI fornece à comunidade acadêmica informação sobre o quanto este instrumento de divulgação tem sido considerado relevante por organizações empresariais ou não no Brasil. Esta busca crescente por divulgação de RSC via GRI pode dever-se ao objetivo de legitimação de estratégias e práticas organizacionais, como também de criação de valor e melhoria de reputação organizacional. Como contribuição tem-se a análise detalhada da evolução da divulgação de relatórios GRI pelas organizações brasileiras. Além disso, o estudo contribui ao sinalizar que a GRI tem se firmado como um importante meio para a divulgação de informações de ações socioambientais para organizações brasileiras. Do ponto de vista acadêmico, a pesquisa colabora ao avançar nos estudos relativos ao *disclosure* voluntário e ao aprofundar a análise da qualidade dos relatórios GRI elaborado pelas organizações.

**Palavras-chave:** Responsabilidade Social Corporativa. Divulgação. *Global Reporting Initiative*. Adesão. Brasil.

## 1 Introduction

The interest on the part of organizations in undertaking Corporate Social Responsibility (CSR) practices has grown due to pressure from different social segments (Carroll, 1999). In recent decades, corporate social responsibility has become part of the public debate involving social problems, leading to changes in the social contract between organizations and society (Bertoncello & Júnior, 2007; Cochran, 2007). The Stakeholder Theory proposes that organizations are also evaluated for their relationship with society and the environment (Carroll, 1999; Freeman, Wicks, & Parmar, 2004; Jamali, 2008). Literature has pointed to the possibility of positive returns for companies that undertake social responsibility and sustainability actions (Margolis & Walsh, 2003; Udayasankar, 2008; Waddock & Graves, 1997).

In this context of CSR relevance, companies, as well as some non-business organizations, have begun to be concerned with these issues, incorporating them into their strategic process with a view to obtaining an image and reputation improvement, in addition to obtaining competitive advantage (Archel, Husillos, Larrinaga, & Spence, 2009; E. A. Silva, Freire, & Silva, 2014; Sutantoputra, 2009). The practice of disclosing information related to CSR, as well as the format of this disclosure, is still an open question, although there is a large contingent of organizations carrying out this disclosure (Michelon, 2011). In Brazil, this practice is increasingly consolidated (Gisbert & Lunardi, 2012). A recent trend is the disclosure of CSR and sustainability reports integrated with the company's other statements, which is proposed as a way to bring to the public concrete and joint information on strategy, governance and performance perspective, in order to reflect, for the business context, the social, environmental and economic aspects in which the company is inserted (Flower, 2015; Thomson, 2015).

In the disclosure process, the Global Reporting Initiative (GRI) assists organizations that intend to disclose documents that bring information about organizations' social responsibility practices (Nikolaeva & Bicho, 2011). Through the construction of guidelines and indicators, GRI models for sustainability reports are prepared in a way to help organizations in the production and dissemination of CSR reports. It is noteworthy that the models developed by the GRI can be used by all types of organizations, regardless of size or nature.

CSR reports tend to provide a complete and balanced picture of the organizations' socioeconomic actions. The disclosure of GRI reports can be seen by organizations as a means of legitimizing their actions before their various stakeholders. In addition, the disclosure of the GRI report carried out by the organization may signal that the expected benefits are greater than the costs of preparing the report. With this, it is opportune to try to answer the following research question: **Are Brazilian organizations adhering to the GRI, considering it as an instrument capable of assisting in the process of disclosing CSR and aiming at improving reputation and obtaining legitimacy?**

The importance of GRI in the context of CSR disclosure motivates the accomplishment of this work that aims to analyze the evolution of adherence to GRI and the quality of CSR reports released by Brazilian organizations. Additionally, we sought to verify the organizations characteristics that are associated with better report quality. To this end, data from all 461 Brazilian organizations that joined the GRI in the period 2000-2017 were

analyzed, for a total of 2,142 annual observations. Data were collected from the Global Reporting Initiative database, and an in-depth descriptive study complemented by tests for the difference in proportions were carried out.

Brazil is an emerging country in the international economic scenario with great social inequalities (Conceição, Dourado, & Silva, 2012), in addition to being an environment with rich biodiversity, which makes the social responsibility of organizations that operate in this environment something relevant. In addition, there is an increase in concern with social and environmental issues in the scope of corporations, highlighting the increased search for mechanisms that help the dissemination of this information (Conceição, Dourado, & Silva, 2012). The study is also relevant in the academic field, as it encourages research on the evolution of voluntary disclosure and highlights the quality of the preparation of sustainability reports.

The study on the disclosure of CSR report in GRI format provides the academic community with information on how relevant this disclosure instrument has been considered by business organizations or not in Brazil. This growing search for CSR disclosure via GRI may be due to the objective of legitimizing organizational strategies and practices, as well as creating value and improving organizational reputation. From an academic point of view, the work collaborates by advancing research on voluntary disclosure and by deepening the analysis of GRI reports quality prepared by organizations.

The work is organized in four more sections, in addition to this introduction. The following section contains the theoretical framework regarding Corporate Social Responsibility and its disclosure, Global Reporting Initiative (GRI) and the study's hypotheses. After that, the third section contemplates the methodology used to reach the study purpose; the fourth section presents the analysis of the results obtained and, finally, the conclusions of the work are presented.

## **2 Literature Review**

### **2.1 Corporate Social Responsibility and disclosure**

Social and environmental issues have gained relevance as long as social and environmental concerns have become more critical. Financial scandals and environmental disasters have highlighted these problems. The greater concern of organizations with social responsibility can be manifested in organization's decisions on strategic policies, as well as in its organizational management model, since the focus on these themes places greater emphasis on moral and ethical aspects. This change in organizational conduct tends to lead to the establishment of better relationships with the group of organization stakeholders (McWilliams & Siegel, 2001). Regarding this organizational behavior, the Stakeholder approach is at the core of the organization's concern for the well-being of all its stakeholders (Freeman, Rusconi, Signori, & Strudler, 2012). The Stakeholder approach proposes that the organization that gives importance to ethical conduct and is concerned with the well-being of its stakeholders and with the interaction with the environment tends to respect them and establish trust relationships, based on principles of harmony, justice and loyalty (Brown & Forster, 2013; Harrison, Bosse, & Phillips, 2010; Tullberg, 2013).

The search for improving the organization's image and reputation, notably for companies, has been pointed out in the literature as capable of playing an important role in CSR policy and organizational sustainability (Deephouse & Carter, 2005; Seramim, Zanella, & Rojo, 2017). The organization's legitimacy, or its performance, can be seen as a type of "social contract" between the organization and society (Bebbington, Larrinaga-González, & Moneva-Abadía, 2008). In this sense, organizational legitimacy is associated with the



organization's desired and expected actions within the social system. Under this "social contract", the social system is able to "punish" companies that do not respect it. The Legitimacy Theory proposes that organizations seek to legitimize themselves through their actions (Craig Deegan, 2002; Tilling & Tilt, 2010).

The performance of CSR actions can be the result of pressure from the institutional and legal environment, or even the organization's own initiative motivated by the possibility of legitimizing itself before society, as well as improving its reputation. Whatever the reason for undertaking these actions, their disclosure will be a natural process for the organization that undertakes them.

Despite the voluntary nature and the absence of a report format for the dissemination of CSR actions, companies, and even non-business organizations, have undertaken actions of this nature and disseminated them through different means and formats. The objective of legitimizing the organization's activities is to have its presence and actions accepted by its stakeholders (Craig Deegan, 2002; Dowling & Pfeffer, 1975; Suchman, 1995). Annual reports can be a way to obtain, maintain or repair organization legitimacy, serving as an instrument to improve the perception of the organization's stakeholders and even influence concepts and opinions about society's values and norms (De los Ríos Berjillos, Ruiz Lozano, Tirado Valencia, & Carbonero Ruz, 2012; Craig Deegan, Rankin, & Tobin, 2002; C. Deegan, Rankin, & Voght, 2000; Tilling & Tilt, 2010).

Organizational managers, as well as owners who see reputation as a relevant concern, may be more likely to take CSR actions as an additional way to increase the importance given to organizational reputation. In fact, research has shown that the concept of organizational reputation helps to understand CSR disclosure practice (Bebbington, Larrinaga, & Moneva, 2008; De los Ríos Berjillos et al., 2012; Deephouse & Carter, 2005).

In this context, information about the company is required not only by investors, but also by the set of stakeholders who are related to the organization. There arises the need for disclosure to meet diverse demands, not only those required by legal rules, which raises the voluntary disclosure of information. In fact, research has documented an increase in the publication of information on CSR and sustainability, despite the voluntary nature of such disclosure (Meek, Roberts, & Gray, 1995; Reis, Cintra, Ribeiro, & Dibbern, 2015).

## **2.2 Global Reporting Initiative**

The sustainability report is the instrument through which the company discloses its actions and projects related to its social and environmental policies, thus demonstrating its degree of concern with the social and environmental scope in which it operates. Although in countries like England, Germany and France the preparation of such a report is mandatory, in Brazil there is no law that requires its production. Some sectors of the economy have regulations that strongly encourage the company to disclose this type of information, such as the electricity sector (Braga, Silva, & Santos, 2014).

Organizations, such as the Global Reporting Initiative (GRI), have developed reporting models under the disclosure guidelines and principles, with the aim of promoting this practice by organizations in general. The GRI models aim to harmonize social responsibility and sustainability reports in order to improve their analysis, aiming for sustainability reports become routine publications and comparable like the financial reports (Ambrozini, 2017; Crisóstomo, Prudêncio, & Forte, 2017; Garcia, Cintra, Ribeiro, & Dibbern, 2015).

The GRI reports are structured according to guidelines that aim to establish principles and essential and complementary indicators that allow the adequate disclosure of organizations' social action and sustainability concern, taking into account the diversity

among them (Madalena, Rover, Ferreira, & Ferreira, 2016). The first set of GRI Guidelines was launched in June 2000 (GRI, 2015). Since then, these guidelines have been updated in the search for reporting further improvement. The version (G4), launched in 2013, with an emphasis on the principle of materiality and with more specific indicators (T. L. G. B. Silva, Maia, & Leal, 2017), went through a development process in which the guidelines evolved and gave rise to the version of GRI Standards, which had its latest version launched in 2016, being the most recent evolution of the GRI reports. About this issue, literature has pointed to the need for greater comprehensibility, completeness, or comprehensiveness of the report in order to incorporate not only intentions for actions, but concrete information on actions and even social performance indicators (Bouten, Everaert, Van Liedekerke, De Moor, & Christiaens, 2011; Robertson & Nicholson, 1996; Van Staden & Hooks, 2007). Since 2010, GRI reports have also brought the new concept of Integrated Reports, which transmit economic, financial and social information together and which has been suggested as a practice that can lead to advances in disclosure, despite the still existing controversies (Adams, 2015; Flower, 2015; Thomson, 2015).

### 2.3 Hypotheses

After more than a decade of GRI as a means of disseminating sustainability information, it is advisable to study the adherence of Brazilian organizations throughout this period, taking into account the degree of adhesion, the quality of the reports and the attributes characterizing such adhering organizations.

Under the theoretical Legitimacy and Voluntary Disclosure frameworks, organizations, mainly companies, would be interested in publicizing their social actions and sustainability concern aiming the benefits associated with legitimizing their operations, as well as improving image and reputation (Ambrozini, 2017; Craig Deegan, 2002; Dowling & Pfeffer, 1975; Tilling & Tilt, 2010). GRI's high visibility makes it an interesting means of disseminating sustainability reports to organizations, notably companies, motivated by legitimacy objectives. The Brazilian market has undergone transformations that have left companies more exposed to competition and international visibility, which has led companies to publicize more information of economic, social and environmental nature, with GRI being an important instrument in this process (Garcia et al., 2015). This argument makes the suggestion that there was a growing adherence to the GRI by the Brazilian organization.

Information disclosure is always associated with a cost. The disclosure of reports through the GRI involves this additional cost that must be supported by the organization, which suggests the objective of a counterpart for the expectation of benefits associated with the organizational reputation, as well as the legitimacy of actions and gains with value creation (Bebbington, Larrinaga-González, et al., 2008; Craig Deegan, 2002). In this scenario, companies seem to be more likely to bear such costs. It is worth mentioning, however, that in Brazil, the mandatory aspect of the Value Added Statement (DVA) and the pronouncements of the Accounting Pronouncements Committee (CPC) represent progress in the CSR disclosure. Information disclosed in the DVA already includes information requested by the GRI, such as workers benefits dealt by CPC 33 and CPC 07, which deals with government subsidies and assistance. This information availability in the DVA has already had its cost incurred and eases the dissemination of this information in the GRI. Based on this argument, it is proposed as hypothesis that business organizations are more likely to join GRI, as well as to publish better quality reports according to GRI guidelines.

*Hypothesis 1: Business organizations are more likely to disclosure better quality reports following the GRI guidelines.*

*Hypothesis 1a: Business organizations are more likely to disclosure reports in higher models according to the GRI guidelines.*

*Hypothesis 1b: Business organizations are more likely to disclosure reports with a higher application level in accordance with the GRI guidelines.*

*Hypothesis 1c: Business organizations are more likely to audit their reports.*

The situation of the company as listed or not listed in stock exchange matters to the disclosure level, be it voluntary or mandatory disclosure (Ahmed & Courtis, 1999; Firth, 1979; Loderer & Waelchli, 2010). Stock exchanges usually have disclosure policies, causing companies to start disclosing a wider range of information content than unlisted companies (Buzby, 1975; Firth, 1979). In addition, listed companies tend to be more interested in value creation because they are more targeted by investors, who are increasingly demanding from companies the compliance to good rules of conduct, and the ability to undertake corporate sustainability. Based on the arguments presented, the following research hypothesis is proposed:

*Hypothesis 2: Listed companies are more interested in publishing integrated reports.*

Regarding firm size, studies argue that this firm attribute can influence the dissemination of sustainability reports (Gallego-Álvarez & Quina-Custodio, 2016; Murcia & Santos, 2009; Ricardo, Barcellos, & Bortolon, 2017). The fact that larger organizations have more visibility and, consequently, greater pressure from stakeholders (Lopes, De Luca, Góis, & Vasconcelos, 2017), as well as more possibility to undertake socio-environmental actions, and to bear voluntary disclosure costs (Husted & Allen, 2007), leads to the hypothesis that larger organizations are both more likely to adhere to the GRI, as well as to adopt higher standards of disclosure.

*Hypothesis 3: Larger organizations are more likely to adopt higher standards of disclosure.*

*Hypothesis 3a: Larger organizations are more likely to disclose higher models reports in accordance with the GRI guidelines.*

*Hypothesis 3b: Larger organizations are more likely to disclose integrated reports.*

*Hypothesis 3c: Larger organizations are more likely to audit their reports.*

### **3 Methodological Procedures**

#### **3.1 Research Method**

Regarding the study purpose, which is to analyze the level of evolution in the adhesion to GRI and the quality of the sustainability reports presented by Brazilian organizations, this research is characterized as descriptive and quantitative. A descriptive study seeks to describe the characteristics of a specific problem, presenting information about a specific population (Collis & Hussey, 2004; Gray, 2011). This way, the work intends to characterize and synthesize the evolution in the adhesion of Brazilian organizations to the GRI. The work follow a quantitative approach, since it uses statistical analysis (Roesch, 2005), and the study uses descriptive analysis and tests for the difference in proportions. Finally, regarding procedures, it is classified as documentary given that it uses firm data collected from the Global Reporting Initiative database.



### 3.2 Population and Sample

The research population corresponds to all Brazilian organizations that publish GRI sustainability report. Regarding the research sample, all Brazilian organizations that released sustainability reports through the Global Reporting Initiative in the period 2000-2017 were selected, following or not following its guidelines. It should be noted that the year 2000 was the first year that Brazilian organizations published CSR reports in GRI. The latest reports available are for the year 2017. Data were obtained through a request made to the Global Reporting Initiative, consisting of the list of all Brazilian organizations that released the GRI report. Thus, the study sample consists of 2,142 annual observations from 461 Brazilian organizations. It is noteworthy that, due to data available, there were variations in the number of observations throughout the analysis.

Information regarding the nature of the organizations was collected. The type of organization refers to a business or other organization, and whether the business organization is listed not on a stock exchange. The organization size is segregated into three categories. The quality of the GRI report that involves the disclosure of the integrated report, the models adopted by GRI reports, the level of GRI application, and whether the reports are audited. Information regarding the type of organization, the stock exchange listing and the integrated report is only available from 2010. The information regarding the level of application of the reports and about their audit were analyzed in the periods 2002-2017 and 2002-2015, respectively, since these two elements were implemented in the GRI report format G2.

### 3.3 Data Analysis Technique

In order to analyze the evolution of GRI adherence by Brazilian organizations and the quality of CSR reports released by them, an in-depth descriptive analysis was carried out. The descriptive analysis was performed for all aspects investigated in order to have a better understanding of the data set under study. Additionally, to verify the organizations characteristics that contribute to the best quality of the report, tests for the difference in proportions were carried out (chi-square tests). The difference in proportions test is a non-parametric test that aims to analyze the association between qualitative variables. The basic feature of this test is the comparison of proportions.

## 4 Analysis of Results

### 4.1 Characteristics of organizations

The results indicate that, over the period 2000-2017, there was a relevant increase in the number of Brazilian organizations that started to publish the sustainability report through GRI. Studies have already documented a growth in the publication of information on CSR and sustainability, despite the voluntary nature of such disclosure (Conceição et al., 2012; Meek et al., 1995; Reis et al., 2015).

Data presented in Table 1 show that, since the beginning of the application of GRI report in Brazil, there has been a growing adherence to it by Brazilian organizations, as a means of disseminating information on Corporate Social Responsibility (CSR). In 2000, only 2 Brazilian organizations released sustainability reports in GRI. This number expands to 244 organizations in 2017. However, it should be noted that the year 2013 presented the highest number of GRI reports, 262 reports. This growing adherence to the disclosure of sustainability report, through the GRI, suggests the increased concern on the part of Brazilian organizations in undertaking CSR and sustainability actions, as well as in publicizing these actions to society.

**Table 1**  
*Annual growth in GRI adherence in Brazil*

Year	Number of Reports	Year Growth (%)	Total
2000	2		0.09%
2001	2	0.00	0.09%
2002	6	200.00	0.28%
2003	5	-16.67	0.23%
2004	8	60.00	0.37%
2005	17	112.50	0.79%
2006	23	35.29	1.07%
2007	54	134.78	2.52%
2008	88	62.96	4.11%
2009	105	19.32	4.90%
2010	172	63.81	8.03%
2011	175	1.74	8.17%
2012	208	18.86	9.71%
2013	262	25.96	12.23%
2014	258	-1.53	12.04%
2015	261	1.16	12.18%
2016	252	-3.45	11.76%
2017	244	-3.17	11.39%
Total	2.142		100%
Average growth (%)		41,86	

**Source:** *Elaborated by the authors.*

Information about the type, or nature, of the organization is recorded from 2010. Among the organizations that adhered to the GRI report, it is observed that organizations of different natures have adhered to the report (Table 2). Table 2 shows the number of organizations that first joined the GRI report each year. As expected, companies have been the organizations that most adhere to the GRI (Private Company, Subsidiary and State Company), probably because companies are the organizations that are more concerned with the search for legitimizing their operations, as well as improving firm image and reputation (Ambrozini, 2017; Craig Deegan, 2002; Dowling & Pfeffer, 1975; Tilling & Tilt, 2010). The other types of organizations (Cooperatives, Partnerships, Non-profit Organizations, Public Organizations) showed a much lower proportion. It can be seen that there was an increase in membership until 2013, when the number of new organizations seems to stabilize sustainability actions through GRI seems to stabilize.

**Table 2***Organizations that have adopted GRI for the first time each year*

Organization Nature	2010	2011	2012	2013	2014	2015	2016	2017	Total	%
Private companies	42	26	38	51	11	21	27	17	233	71.91
Growth (%)		-38.10	46.15	34.21	-78.43	90.91	28.57	-37.04		
Subsidiaries	8	3	5	7	4	3	2	1	33	10.19
Growth (%)		-62.50	66.67	40.00	-42.86	-25.00	-33.33	-50.00		
State company	3	1	2	0	1	2	0	1	10	3.09
Growth (%)		-66.67	100.00	-100.00		-300.00	-500.00			
Cooperatives	1	1	3	4	2	1	2	1	15	4.63
Growth (%)		0.00	200.00	33.33	-50.00	-50.00	100.00	-50.00		
Partnerships	1	1	1	1	0	0	0	0	4	1.23
Growth (%)		0.00	0.00	0.00	-100.00					
Non-profit organizations	5	1	2	4	0	1	4	1	18	5.56
Growth (%)		-80.00	100.00	100.00	-100.00		300.00	-75.00		
Public organizations	2	3	1	2	1	0	1	1	11	3.40
Growth (%)		50.00	-66.67	100.00	-50.00	-100.00		0.00		
Total	62	36	52	69	19	28	36	22	324	100.00
Growth (%)		-41.94	44.44	32.69	-72.46	47.37	28.57	-38.89		

**Source:** *Elaborated by the authors.*

Table 3 contains the total number of organizations that have joined the GRI in each year of study. It appears that companies are the majority among the organizations that publish sustainability reports through GRI (89.66%) (Private Company, Subsidiary and State Company). This result is a strong indication that such organizations, notably private companies (70.54%), are more interested in publicizing their social actions and concern for sustainability, probably due to motivations associated with the legitimacy of their activities and the search for improvement of reputation and image that are reflected in firm value creation.

**Table 3***Types of organizations that adopt GRI*

Nature of the Organization	2010	2011	2012	2013	2014	2015	2016	2017	Total	%
Private companies	113	125	147	190	183	188	180	171	1.494	70.54
Growth (%)		10.62	17.60	29.25	-3.68	2.73	-4.26	-5.00		
Subsidiaries	29	23	25	30	33	32	25	25	273	12.89
Growth (%)		-20.69	8.70	20.00	10.00	-3.03	-21.88	0.00		
State company	12	11	13	14	14	13	14	13	132	6.23
Growth (%)		-8.33	18.18	7.69	0.00	-7.14	7.69	-7.14		
Cooperatives	1	2	4	8	10	10	11	13	59	2.79
Growth (%)		100.00	100.00	100.00	25.00	0.00	10.00	18.18		
Partnerships	3	4	4	4	4	4	4	4	37	1.75
Growth (%)		33.33	0.00	0.00	0.00	0.00	0.00	0.00		
Non-profit organizations	10	6	10	12	10	12	14	14	92	4.34
Growth (%)		-40.00	66.67	20.00	-16.67	20.00	16.67	0.00		
Public organizations	3	4	5	4	4	2	4	4	31	1.46
Growth (%)		33.33	25.00	-20.00	0.00	-50.00	100.00	0.00		
Total	171	175	208	262	258	261	252	244	2.118	100.00
Growth (%)		2.34	18.86	25.96	-1.53	1.16	-3.45	-3.17		

**Source:** *Elaborated by the authors.*

The expected higher interest of companies, due to the interest in value creation, motivates a detailed attention to this group of organizations. The search for value creation is more prominent in companies listed on the stock exchange. Analyzing specifically the group of companies that joined the GRI, it can be seen that it is divided between listed companies (50.19%) and non-listed companies (49.81%). Listed companies have a slightly higher proportion regarding the disclosure of GRI reports (Table 4). However, companies that are not listed are also interested in maintaining a good image with their suppliers and customers and with funding agents. This result suggests that companies in general believe that GRI has potential for widely broadcast and that this wide information dissemination about the company is positive for it. The test for the difference in the proportions showed that there was no difference between the proportions of disclosure of listed and unlisted companies ( $p$ -value = 0.773).

**Table 4***Adhesion of listed and non-listed organizations*

	2010	2011	2012	2013	2014	2015	2016	2017	Total	%
Non-listed	64	81	100	118	116	109	104	99	791	49.81
Growth (%)		26.56	23.46	18.00	-1.69	-6.03	-4.59	-4.81		
Listed	55	78	85	116	114	124	115	110	797	50.19
Growth (%)		41.82	8.97	36.47	-1.72	8.77	-7.26	-4.35		
Total	119	159	185	234	230	233	219	209	1.588	
Growth (%)		33.61	16.35	26.49	-1.71	1.30	-6.01	-4.57		

**Source:** *Elaborated by the authors.*

GRI classifies organizations into three size categories as defined by the European Union. “Large” organizations are considered to be those that employ more than 250 people, which have an annual turnover of more than 50 million euros, and the total annual balance exceeds 43 million euros. The European Union still characterizes “small” organizations the ones that employ less than 250 people, with annual turnover less than 50 million euros, and which total annual balance is less than 43 million euros. In this classification there is still the category “Multinational” which presents characteristics similar to those of large organizations, being organizations that employ more than 250 people and are present in other countries. Table 5 shows the number of Brazilian organizations that reported sustainability reports via GRI in the period 2000-2017.

Among the organizations that used GRI as a means of reporting sustainability information, there is a preponderance of large organizations (83.00%) that, added to multinationals (9.76%), represent 92.76% of Brazilian institutions in GRI. Tests for the difference in proportions between small and large organizations confirmed the superiority of the number of large organizations (p-value = 0.0000), as well as the proportion of multinationals over small organizations (p-value = 0.0000).

**Table 5**  
*Adhesion of GRI by organization size*

Year	Organization Size						Total	Growth (%)
	Small Size	Growth (%)	Large Size	Growth (%)	Multinational	Growth (%)		
2000	0		2		0		2	
2001	0		2	0.00	0		2	0.00
2002	0		6	200.00	0		6	200.00
2003	0		5	-16.67	0		5	-16.67
2004	0		8	60.00	0		8	60.00
2005	1		16	100.00	0		17	112.50
2006	0	-100.00	23	43.75	0		23	35.29
2007	2		51	121.74	1		54	134.78
2008	4	100.00	78	52.94	6	500.00	88	62.96
2009	5	25.00	93	19.23	7	16.67	105	19.32
2010	9	80.00	151	62.37	12	71.43	172	63.81
2011	12	33.33	144	-4.64	19	58.33	175	1.74
2012	18	50.00	163	13.19	27	42.11	208	18.86
2013	20	11.11	212	30.06	30	11.11	262	25.96
2014	20	0.00	214	0.94	24	-20.00	258	-1.53
2015	23	15.00	210	-1.87	28	16.67	261	1.16
2016	23	0.00	200	-4.76	29	3.57	252	-3.45
2017	18	-21.74	200	0.00	26	-10.34	244	-3.17
Total	155		1.778		209		2.142	
Average growth (%)		17.52		39.78		68.95		41.86
% Total		7.24		83.00		9.76		

**Source:** *Elaborated by the authors.*

This result signals that, in fact, the organization size attribute is relevant to the organization decision about publishing sustainability report through GRI, as already highlighted in the literature (Gallego-Álvarez & Quina-Custodio, 2016; Murcia & Santos, 2009; Ricardo et al., 2017). The disclosure cost factor can be a limiting factor for smaller organizations.



## 4.2 Quality of CSR reports

Regarding the quality of information provided by organizations, some elements may be considered as important: issuance of integrated reports, adherence to GRI guidelines, the level of application of the report and the audit of the sustainability report.

Concerning the issuance of reports that jointly disclose financial and non-financial information (integrated reports) it is observed that, although small, there has been some adherence by Brazilian organizations (Table 6). The vast majority of these organizations still do not publish integrated reports (87.28%). However, it should be reported that in the periods 2010-2011 and 2014-2015, the number of integrated reports increased, which may signal an increasing interest by organizations, in certain periods, to jointly disclose their social and sustainability actions with financial information.

**Table 6**

*Adhesion to the disclosure of integrated reports*

Integrated report	2010	2011	2012	2013	2014	2015	2016	2017	Total	%
No	137	126	172	228	219	187	175	183	1.427	87.28
Growth (%)		-8.03	36.51	32.56	-3.95	-14.61	-6.42	4.57		
Yes	23	41	24	22	17	34	28	19	208	12.72
Growth (%)		78.26	-41.46	-8.33	-22.73	100.00	-17.65	-32.14		
Total	160	167	196	250	236	221	203	202	1.635	100%
Growth (%)		4.38	17.37	27.55	-5.60	-6.36	-8.14	-0.49		

**Source:** *Elaborated by the authors.*

The GRI guidelines for reporting are constantly evolving. Since the founding of the GRI, five versions of GRI reports have been prepared, aiming at improving the guidelines (content index): the GRI-G1 model, published in 2000; the GRI-G2, published in 2002; the GRI-G3, published in 2006; the GRI-G3.1, published in 2011; the GRI-G4, published in 2013; and the GRI Standards, published in 2016. In addition to these, there is the GRI-Citing that makes explicit reference to the GRI Guidelines, although there is no established content index. GRI-Citing also indicates reports, published after July 1, 2018, which refer to the GRI-G4 guidelines. The organization can also disclose information about its economic, environmental, social and governance performance without following the GRI Guidelines (content index), following a Non-GRI model.

The results shown in Table 7 indicate that a small proportion of organizations have not adopted the GRI guidelines (14.57%), issuing GRI-Referenced or Non-GRI reports. On the other hand, the vast majority of Brazilian organizations (85.43%) have issued reports via GRI (GRI column) following the suggested guidelines, encompassing the following content indexes: GRI-G1, GRI-G2, GRI-G3, GRI-G3.1, GRI-4 and GRI Standards. Z test for the difference in proportions between groups confirms the superiority of the proportion of organizations adopting the GRI guidelines (p-value = 0.0000), which confirms the interest of Brazilian organizations in preparing sustainability reports following international GRI standards.

**Table 7**  
*Adherence to the GRI model of the sustainability report*

Year	Non-GRI	Growth (%)	Citing-GRI	Growth (%)	GRI	Growth (%)	Total	Growth (%)
2000	1		0		1		2	
2001	1	0.00	0		1	0.00	2	0.00
2002	1	0.00	0		5	400.00	6	200.00
2003	1	0.00	1		3	-40.00	5	-16.67
2004	1	0.00	0	-100.00	7	133.33	8	60.00
2005	4	300.00	0		13	85.71	17	112.50
2006	5	25.00	0		18	38.46	23	35.29
2007	11	120.00	4		39	116.67	54	134.78
2008	12	9.09	2	-50.00	74	89.74	88	62.96
2009	12	0.00	2	0.00	91	22.97	105	19.32
2010	14	16.67	2	0.00	156	71.43	172	63.81
2011	12	-14.29	1	-50.00	162	3.85	175	1.74
2012	16	33.33	3	200.00	189	16.67	208	18.86
2013	17	6.25	4	33.33	241	27.51	262	25.96
2014	21	23.53	17	325.00	220	-8.71	258	-1.53
2015	37	76.19	6	-64.71	218	-0.91	261	1.16
2016	35	-5.41	19	216.67	198	-9.17	252	-3.45
2017	38	8.57	12	-36.84	194	-2.02	244	-3.17
Total	239		73		1.830		2.142	
% total	11.16		3.41		85.43			

**Source:** *Elaborated by the authors.*

The level of application of the sustainability report aims to reflect the degree of adherence to the GRI guidelines in the structure of the sustainability report. The G2 model has two levels of application: “Content index” and “In accordance” (G2). The “Content index” indicates that there is a GRI content index available in the report, which, however, is not declared in accordance with the G2 model guidelines. In turn, the degree of application “In accordance” (G2) indicates that the GRI report is in consonance with the G2 report guidelines. With the publication of models G3 and G3.1, there were three levels of application: A (advanced reports), B (intermediate reports) and C (beginning reports). It is also possible to adopt a (+) in these three levels of application for GRI reports that used external verification. In 2013, with the use of the G4 model, the application level changed to “In accordance” or “Not declared”. “In accordance” report (G4), from 2014 on, indicates that the report is prepared in according with the guidelines of the G4 report. “Not declared” report means that it does not make it explicit that it is “In accordance”, but includes the G4 content index. Finally, with the publication of the model GRI Standards, the application level “In accordance” remained and the “GRI-Referenced” was introduced. Report with application level “GRI-Referenced” indicates that an explicit declaration has been made for each standard being referenced, and that they can use the individual GRI Standards or part of them.

Table 8 shows the number of sustainability reports released by year, according to the level of application of the GRI for each report. The results indicate that 58.25% (A, A+, B, B+, C and C+) of the reports have application levels related to the G3 and G3.1 models, thus demonstrating better quality CSR reports. “In accordance” reports have grown significantly since 2014 due to the publication of the G4 and Standards model. This growth signals the migration of the application level of reports to the G4 and Standards model. It should be noted

that the “GRI-Referenced” application level was not applied to any GRI report from Brazilian organizations during the period of analysis. Over time, the set of results indicates a strong trend towards adopting the GRI guidelines, which means improving the quality of reports.

**Table 8**  
*Adoption at the application level in CSR reports*

Year	Application Level									
	Undeclared	Content Index	In accordance	C	C+	B	B+	A	A+	Total
2002	0	1	1	0	0	0	0	0	0	2
2003	0	1	2	0	0	0	0	0	0	3
2004	0	5	2	0	0	0	0	0	0	7
2005	0	9	4	0	0	0	0	0	0	13
2006	0	10	6	1	0	0	0	1	0	18
2007	4	2	1	9	2	6	5	3	7	39
2008	14	0	0	21	0	19	5	5	10	74
2009	9	0	0	30	2	17	7	13	13	91
2010	24	0	0	48	4	35	11	13	21	156
2011	11	0	0	50	4	42	11	14	30	162
2012	10	0	0	56	9	53	19	15	27	189
2013	12	0	0	76	8	63	30	15	37	241
2014	17	0	61	40	4	57	21	5	15	220
2015	24	0	140	21	0	18	5	4	6	218
2016	10	0	188	0	0	0	0	0	0	198
2017	14	0	180	0	0	0	0	0	0	194
Total	149	28	585	352	33	310	114	88	166	1.825
% year	8.16	1.53	32.05	19.29	1.81	16.99	6.25	4.82	9.10	

**Source:** *Elaborated by the authors.*

In order to improve the reliability of the sustainability reports released through the GRI, it was proposed the auditing of the application level statement. The audit process of the sustainability report application level can be classified into three: “Self-declared”, “GRI-checked” and “Third-party-checked”. The “Self-declared” indicates that the declaration of the application level of the report has not been confirmed by the GRI nor verified by third parties. In turn, the “Third-party-checked” indicates that the application level declaration has undergone a GRI check. It should be noted that the GRI application level verification ended in December 2014, making the reports sent for verification after this period not to be referred to with the “GRI Check”. Finally, the “Third-party-checked” shows that the level of application of the report has been confirmed by external auditors. GRI recommends that organizations submit their reports for external audit. Table 9 shows the evolution of the number of reports submitted to the audit, whether from the GRI or from another entity external to the organization.

**Table 9**  
*Audit on CSR reports*

Year	Self-declared	Growth (%)	GRI-checked	Growth (%)	Third-party-checked	Growth (%)	Total
2002	1		0		0		1
2003	2	100	0		0		2
2004	2	0	0		0		2
2005	4	100	0		0		4
2006	6	50.00	1		0		7
2007	20	233.33	10	900	3		33
2008	32	60.00	20	100	8	166.67	60
2009	44	37.50	23	15.00	15	87.50	82
2010	80	81.82	26	13.04	26	73.33	132
2011	74	-7.50	51	96.15	26	0.00	151
2012	86	16.22	70	37.25	23	-11.54	179
2013	112	30.23	82	17.14	35	52.17	229
2014	82	-26.79	45	-45.12	15	-57.14	142
2015	49	-40.24	0	-100	5	-66.67	54
Total	594		328		156		1.078
Average growth (%)	48.81		114.83		30.54		
% total	55.10		30.43		14.47		100.00

**Source:** *Elaborated by the authors.*

It is observed that the proportion of reports without external audit (55.10%) is still statistically higher than that of reports submitted to external verification (GRI or other external to the organization) (44.9%), according to the z test of difference of proportions (p-value = 0.0009). However, it should be noted that the year 2015 had no report verified by GRI, since this operation ended in 2014. In addition, the sustainability reports for the period 2016-2017 did not undergo any type of verification of the application level, since this process was established only up to the sustainability reports models GRI-G3 and GRI-G3.1.

### 4.3 Characteristics of organizations associated with the quality of information provided in CSR reports

Table 10 shows numbers related to adherence to the GRI guidelines between business and non-business organizations in Brazil. It can be seen that both business and non-business organizations have a strong trend to prepare sustainability reports following the GRI guidelines and presenting an established content index (GRI-G1, GRI-G2, GRI-G3, GRI-G3.1, GRI-G4 and GRI Standards). In fact, the proportion of organizations with reports in this format is higher than that in another format, both for non-business organizations (92.70% x 7.30%) and for companies (84.52% x 15.48%).

This greater propensity to adhere to the more advanced reporting models (GRI-G1, GRI-G2, GRI-G3, GRI-G3.1, GRI-G4 and GRI Standards), whose guidelines are more improved and which make information better disclosed, as well as a higher trend for organizations to release sustainability reports, is confirmed by a test for the difference in proportions ( $\chi^2$ ). The test for the difference between proportions was significant at 1% (p-value = 0.000), indicating that business organizations are more likely to release reports of higher models according to the GRI guidelines (Hypothesis 1a).

**Table 10**  
*Organization type and report type*

Type of Organization	Report Type								Total
	Non-GRI	Citing-GRI	GRI-G1	GRI-G2	GRI-G3	GRI-G3.1	GRI-G4	GRI Standards	
Non-business Organization	8	8	0	0	90	23	90	0	219
% non company	3.65	3.65	0.00	0.00	41.10	10.50	41.10	0.00	100.00
% report type	3.38	10.96	0.00	0.00	10.38	8.27	14.66	0.00	10.34
Business organization	229	65	4	41	777	255	524	4	1.899
% company	12.06	3.42	0.21	2.16	40.92	13.43	27.59	0.21	100.00
% report type	96.62	89.04	100.00	100.00	89.62	91.73	85.34	100.00	89.66
Total	237	73	4	41	867	278	614	4	2.118
% type of organization	11.19	3.45	0.19	1.94	40.93	13.13	28.99	0.19	100.00

Pearson  $\chi^2(4) = 31.7114$ ; p-value = 0.000.

**Source:** *Elaborated by the authors.*

The values presented in Table 11 show that 58.43% of the reports adopt the GRI guidelines and declare their level of application (C, C+, B, B+, A, A+). Regarding the type of organization, it was observed that private companies disseminate more reports that follow the GRI application levels. The test for the difference between proportions was significant (p-value = 0.000), thus, there is support to say that indeed business organizations are more likely to publish reports with higher level of application according to the GRI guidelines (Hypothesis 1b). The greatest interest of companies associated with value creation concerns may be the factor that makes these organizations the ones with the highest proportion of reports with the highest application level (C, C+, B, B+, A, A+, or In accordance G4 and Standards).

**Table 11**  
*Type of organization and application level*

Type of Organization	Application Level			Total
	Undeclared	In accordance	ABC+	
Private companies	92	439	721	1.252
% application level	7.35	35.06	57.59	100.00
% organization	65.71	71.97	68.41	69.40
Subsidiaries	31	55	151	237
% application level	13.08	23.21	63.71	100.00
% organization	22.14	9.02	14.33	13.14
State company	4	34	74	112
% application level	3.57	30.36	66.07	100.00
% organization	2.86	5.57	7.02	6.21
Cooperatives	2	32	22	56
% application level	3.57	57.14	39.29	100.00
% organization	1.43	5.25	2.09	3.10
Partnerships	0	13	24	37
% application level	0.00	35.14	64.86	100.00



% organization	0.00	2.13	2.28	2.05
Non-profit organizations	9	29	42	80
% application level	11.25	36.25	52.50	100.00
% organization	6.43	4.75	3.98	4.43
Public organizations	2	8	20	30
% application level	6.67	26.67	66.67	100.00
% organization	1.43	1.31	1.90	1.66
Total	140	610	1054	1.804
% application level	7.76	33.81	58.43	100.00
% organization	100.00	100.00	100.00	100.00

Pearson  $\chi^2$  (12) = 42.3829; p-value = 0.000.

Source: *Elaborated by the authors.*

The numbers in Table 12 show that the proportion of organizations that do not yet have the report submitted to external audit (Self-declared) (55.15%) is still statistically higher than those that undergo external verification (GRI-checked and Third-party-checked) (44.85%). It is interesting to note, however, that this result is strongly influenced by the status of reports from business organizations. The proportion of company reports not submitted to external verification (55.83%) is statistically higher than that of company reports that are submitted to this process (44.17%) (p-value = 0.0000). On the other hand, there is no statistically significant difference in relation to the reports of non-business organizations submitted to external verification (50.93%) and those that do not externally audited (49.07%).

The test for the difference in proportions (chi-square) showed that the difference between proportions of the type of audit between companies and non-companies is statistically significant (p-value = 0.018). Therefore, there is support to confirm the hypothesis that business organizations are more likely to have their reports audited (Hypothesis 1c).

**Table 12**  
*Type of Organization and Type of Audit*

Type of organization	Type of Audit			Total
	Self-declared	GRI-checked	Third-party-checked	
Non-business organization	53	45	10	108
% type of audit	49.07	41.67	9.26	100.00
% type of organization	9.00	13.85	6.49	10.11
Business organization	536	280	144	960
% type of audit	55.83	29.17	15.00	100.00
% type of organization	91.00	86.15	93.51	89.89
Total	589	325	154	1.068
% type of audit	55.15	30.43	14.42	100.00

Pearson  $\chi^2$  (2) = 8.0076; p-value = 0.018.

Source: *Elaborated by the authors.*

The tests for the difference in proportions presented in the previous results highlighted what has already been observed in the literature, which indicates that companies are more likely to bear the costs of disclosure, either by seeking legitimacy, reputation and value creation that can be obtained through disclosure voluntary (Ambrozini, 2017; Craig Deegan,

2002; Tilling & Tilt, 2010). Thus, the hypothesis that business organizations are more likely to disseminate better quality reports following the GRI guidelines is accepted (Hypothesis 1).

Table 13 shows the disclosure of integrated reports by listed and non-listed companies. Despite the growth in the issuance of integrated reports, the proportion of companies that do not issue an integrated report (86.68%) is still much higher than that of companies that issue an integrated report (13.32%) (p-value = 0.0000).

It can be observed that companies listed on the stock exchange present greater disclosure of integrated reports than those not listed (32.45% and 67.55%), this difference is significant at 1%, confirming the argument that companies listed on the stock exchange are more interested in disseminating integrated reports (Hypothesis 2). The research findings corroborate the international literature by showing that the fact that a company is listed or not matters for disclosure (Ahmed & Courtis, 1999; Firth, 1979; Loderer & Waelchli, 2010). It is worth mentioning that this difference was observed only in terms of the report quality, since both kinds of companies have the same proportion of disclosure for standard GRI reports (see Table 4). In addition, the cost of the integrated reporting process can be a limiting factor, especially for non-listed companies, from which only 8.38% publish integrated reports.

**Table 13**

*Listed company on the stock exchange and integrated report*

	Integrated Report		Total
	No	Yes	
Non-Listed	667	61	728
% integrated report	91.62%	8.38%	100.00%
% non-listed company	54.54%	32.45%	51.59%
Listed	556	127	683
% integrated report	81.41%	18.59%	100.00%
% listed company	45.46%	67.55%	48.41%
Total	1.223	188	1.411
% integrated report	86.68%	13.32%	100.00%

Pearson  $\chi^2$  (1) = 31.8419; p-value = 0.000.

**Source:** *Elaborated by the authors.*

Table 14 shows that most of the organizations (85.43%), considering the three sizes (small, large and multinational), use, in their CSR reports, the guidelines established by the Global Reporting Initiative (GRI) (G1, G2, G3, G3.1, G4 and GRI Standards). These results indicate that the CSR reports released by organizations have been showing better quality because there is an effort to adopt the guidelines proposed by the GRI. The results also demonstrate that large companies have been prominently disclosing the highest quality models according to the GRI guidelines (Hypothesis 3a). This result is confirmed by the test for the difference in proportions (p-value = 0.000).

**Table 14**

*Organization size and type of GRI report*

Organization Size	Report Type								Total
	Non-GRI	Citing-GRI	GRI-G1	GRI-G2	GRI-G3	GRI-G3.1	GRI-G4	GRI Standards	
Small Size	24	12	0	1	58	24	36	0	155
% report type	15.48	7.74	0.00	0.65	37.42	15.48	23.23	0.00	100.00

% size	10.04	16.44	0.00	2.27	6.55	8.63	5.86	0.00	7.24
Large Size	183	52	5	43	752	219	522	2	1.778
% report type	10.29	2.92	0.28	2.42	42.29	12.32	29.36	0.11	100.00
% size	76.57	71.23	100.00	97.73	84.97	78.78	85.02	50.00	83.01
Multinational	32	9	0	0	75	35	56	2	209
% report type	15.31	4.31	0.00	0.00	35.89	16.75	26.79	0.96	100.00
% size	13.39	12.33	0.00	0.00	8.47	12.59	9.12	50.00	9.76
Total	239	73	5	44	885	278	614	4	2.142
% report type	11.16	3.41	0.23	2.05	41.32	12.98	28.66	0.19	100.00

Pearson  $\chi^2$  (14) = 40.9597; p-value = 0.000.

**Source:** *Elaborated by the authors.*

As already seen, there is still a low level of integrated reporting by Brazilian organizations. However, it can be seen that there is a higher proportion of issuing integrated reports in larger Brazilian organizations (Large Size, Multinational) (Table 15). This difference between proportions of integrated reporting between organizations of different sizes is statistically significant (p-value = 0.001), demonstrating that, in fact, larger organizations are more likely to disclose integrated reports (Hypothesis 3b). Some investigations have also already addressed this relationship between size and disclosure between integrated reports (Gallego-Álvarez & Quina-Custodio, 2016; García-Sánchez & Noguera-Gámez, 2018; Kiliç & Kuzey, 2018).

**Table 15**

*Organization size and integrated report*

Organization Size	Integrated Report		Total
	No	Yes	
Small Size	111	7	118
% integrated report	94.07	5.93	100.00
% size	7.78	3.37	7.22
Large Size	1.184	167	1.351
% integrated report	87.64	12.36	100.00
% size	82.97	80.29	82.63
Multinational	132	34	166
% integrated report	79.52	20.48	100.00
% size	9.25	16.35	10.15
Total	1.427	208	1.635
% integrated report	87.28	12.72	100.00

Pearson  $\chi^2$  (2) = 14.0605; p-value = 0.001.

**Source:** *Elaborated by the authors.*

Similar to what was observed in relation to the issuance of an integrated report, it was found that larger Brazilian organizations are more likely to submit their sustainability reports for external verification by third parties (Large Size = 15.30%; Multinational = 14.14%), comparatively to only 5.19% of small entities (Table 16). The cost can be a determinant for this limitation of smaller organizations. On the other hand, the auditing carried out by GRI seems to be able to balance the proportion of organizations in each group by organization size (Small Size = 29.87%; Large Size = 30.82%; Multinational = 27.27%). The test for the difference in proportions signal non different proportions among organization size and type of

audit (p-value = 0.125). Comparing the proportions of each type of audit between small and large organizations there seems to be a significant higher proportion of large organizations having reports audited, be it Self-declared, GRI-checked or Third-party-checked (p-value = 0.000 in the three comparisons), indicating that larger organizations are more likely to have their reports audit (Hypothesis 3c).

**Table 16**  
*Organization size and type of audit*

Organization size	Type of Audit			Total
	Self-declared	GRI-checked	Third-party-checked	
Small Size	50	23	4	77
% type of audit	64.94	29.87	5.19	100.00
% size	8.42	7.01	2.56	7.14
Large Size	486	278	138	902
% type of audit	53.88	30.82	15.30	100.00
% size	81.82	84.76	88.46	83.67
Multinational	58	27	14	99
% type of audit	58.59	27.27	14.14	100.00
% size	9.76	8.23	8.97	9.18
Total	594	328	156	1.078
% type of audit	55.10	30.43	14.47	100.00

Pearson  $\chi^2$  (4) = 7.2046; p-value = 0.125.

**Source:** *Elaborated by the authors.*

The fact that larger organizations have more visibility and more possibility to bear the costs of disclosure makes them able to improve the quality of their reports (Husted & Allen, 2007; Lopes et al., 2017). Thus, the hypothesis that larger organizations are more likely to adopt higher standards of disclosure is confirmed (Hypothesis 3).

The research findings indicate the presence of organizations of different natures with an outstanding adhesion of large companies to the GRI. In fact, companies are organizations that focus on value creation and interact with a wide range of stakeholders who are sensitive to their actions and demand information. There is also a gradual adherence to the issuance of integrated reports by Brazilian companies.

Regarding the quality of the GRI reports of Brazilian organizations, the results indicate the great adherence to the guidelines established by the GRI, which is an indication of better quality. Larger companies are more likely to issue better quality reports.

## 5 Final Considerations

The work made an analysis of the adhesion to the GRI by organizations from Brazil. The results indicate that, in fact, there has been an increasing adhesion of these organizations to the GRI following an international trend. This tendency can be explained by the search for these organizations to legitimize activities, as well as the improvement of their image and reputation, all with possible positive effects on the value creation.

The results obtained feature the high adherence of business and large organizations to the GRI sustainability reports, as expected, since these organizations are better able to bear the costs of voluntary disclosure. Due to the company's actions with a broader spectrum of stakeholders, the issue of legitimacy and reputation in business organizations that focus on value creation becomes more relevant. In the case of a company, there is also the constant

search for competitive advantage that finds in the company's image another element that may contribute.

It is worth mentioning the acceptance, although small, by Brazilian companies of integrated reports. The increase in adherence to this type of report was noticed in 2015. This result demonstrates that organizations are more committed in presenting to the public their CSR information related to economic performance.

Regarding the quality of GRI reports of Brazilian organizations, there is a great adherence to the GRI report models that follow GRI guidelines, in addition to an increasing disclosure of the levels of application established by GRI. Larger and business organizations are also more likely to present better quality reports. The set of results suggests that GRI is becoming an important means of disseminating sustainability reports for Brazilian organizations.

Finally, it can be considered that the growing adherence to the disclosure of sustainability reports by the Brazilian organization is a sign that socio-environmental issues seem to be present in the strategy of Brazilian organizations, notably companies. There was a relevant growth in the number of organizations, as well as an improvement in the quality of reports. This process is a strong indication that Brazilian companies are indeed considering economic, social and environmental responsibility as an important instrument to achieve the legitimacy of their activities and improve their image and reputation.

Studying the CSR reports released through the GRI allows us to assess how relevant this disclosure instrument has been considered by all kinds of organizations in Brazil. Companies may be being led to disseminate CSR via GRI aiming at legitimizing organizational strategies and practices, as well as creating value and improving organizational reputation. As a contribution of this study, there is a detailed analysis of the evolution of the disclosure of CSR actions via GRI by Brazilian organizations. Furthermore, the study indicates that GRI seems to be establishing itself as an important means for the dissemination of information on socio-environmental actions to Brazilian organizations. From an academic perspective, the research advances on issues associated with voluntary disclosure by deepening the analysis of the quality of GRI reports prepared by organizations.

As possibilities for future works, similar research is feasible in other countries and the comparison between them and Brazil. Qualitative research can also be considered in order to understand the perception of managers about the different ways of undertaking CSR actions, their respective disclosure, and how much this can effectively contribute to the organizational reputation.

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