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# SUSTAINABILITY REPORT AND PERFORMANCE OF BRAZILIAN PUBLIC COMPANIES

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## **ABSTRACT**

This study aims to analyze the association between the publication of the sustainability report and the performance of Brazilian public companies. Data were collected on the publication of the sustainability report from Brazilian companies listed on the Brazilian Stock Exchange (B3), as well as variables related to the characteristics of these companies, namely: performance, size and leverage. The study sample include all Brazilian public companies listed on B3 - except those of financial nature, due to their accounting specificities -, with data available in the period between 2012 and 2016, corresponding to 1,889 observations. This study shows that companies that do publish sustainability reports have better results for performance, size and leverage compared to companies that do not. In addition, correlation coefficients for the variables studied hereunder indicated, among other aspects, a positive and statistically significant association between publication of sustainability report and performance, size and financial leverage.

**Keywords:** Sustainability report. Social and Environmental Management. Performance.

# 1 INTRODUCTION

The government, customers, social organizations, employees, suppliers, shareholders, among other stakeholders, push Companies to adopt socially responsible practices and encourage them to intend resources for investments related to corporate sustainability. Thus, there are many companies that invest or develop activities related to corporate social and environmental responsibility. On the other hand, there are also organizations that resist to this demand and claim that such investments are a hindrance to profit maximization and, therefore, jeopardize the generation of wealth (McWilliams & Siegel, 2000).

The general concern with social and environmental matters has also hit the financial market, as investors have been choosing to invest in sustainable and socially responsible companies. This conclusion is based on the report by the *European Sustainable Investment Forum* (2014), which demonstrates that socially responsible investments had significant growth in Europe between 2011 and 2013. Such accurate data is still not available in Brazil, as surveys

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in this sense are not conducted; but investments of such nature are a global trend. The explanation is that sustainable companies are better qualified to deal with economic, social and environmental issues and, therefore, emerge as a good choice for investors, as in theory they are less risky and generate value in the long term.

Thus, the number of companies that publish specific reports with social and environmental reports grows steadily. As of 2012, the Brazilian stock exchange (B3) has recommended listed companies to expressly indicate whether they publish or not in their reference form sustainability (or similar) reports and where these are available. And, when not published, the companies must justify the refusal to publish it (given the voluntary nature, the companies can further not to express). In 2012, 45.31% of listed companies published a sustainability report or explained why they did not. This percentage increased in the following years, recording 66.29% in 2013, 71.17% in 2014 and 71.65% in 2015 (BM&FBovespa, 2016).

According to Jones, Frost, Loftus and Van Der Laan (2007), publishing the sustainability report is associated to better performance indicators for several reasons. First, companies that historically present a good performance have more resources available to invest in voluntary initiatives, such as publishing sustainability reports. Moreover, the management efficiency provides the ground for another possibility, as efficiently managed companies tend to have a successful performance in several fields beyond economic and financial issues, including the social and environmental disclosure. The authors further mention that companies concerned with sustainability reports normally belong to segments whose activities have a strong environmental (e.g. industry or energy) or social (e.g. banks) impact and, accordingly, are pressured by society these tend to present high economic-financial performance.

Inversely, there is a theoretical school critical to the sustainability report, which challenges its benefits. Gray and Milne (2002) argue that nowhere in the world there is such a thing as sustainability report, since it is virtually impossible to precisely define what a sustainable company is, as well as to report its sustainability. Michelon, Pilonato and Ricceri (2015), in turn, have demonstrated empirically that publishing corporate social responsibility reports do not imply gains in the general quality of the company's disclosure; accordingly, the disclosure of such reports would constitute a symbolic rather than a substantive action. In this sense, publishing the sustainability reports would only represent additional cost to companies.

It is worth mentioning that related studies address the disclosure of non-financial reports with information content on general social and environmental issues, that is, their sample do not distinguish between different types of reports, such as corporate social responsibility report (CSR), integrated report, management report, sustainability report, among others. Rover, Tomazzia, Murcia and Borba (2012), for example, consider standard financial statements and sustainability reports to examine the drivers of the voluntary environmental disclosure; Michelon *et al.* (2015) included in the sample CSR reports, sustainability reports and annual reports of companies to assess the general quality of *disclosure*; Stolowy and Paugam (2018) focused on RSC and sustainability reports to discuss the increase of voluntary social and environmental publications. Therefore, this study intends to fill the gap observed in literature regarding the specific contributions of each performance report published by companies, in the case hereof, the sustainability report.

Furthermore, the association between publishing a sustainability (or similar) report and the performance of companies remains unclear. On the one hand, the company may bear additional costs with the preparation and disclosure of sustainability reports, as well as with the actual social and environmental measures stated in such documents, which tend to compromise performance. On the other hand, companies may also benefit from the disclosure of reports, since the transparency of social and environmental aspects favors the perception investors, consumers, suppliers and other stakeholders have about the company, resulting in positive performance implications. In view of this, the topic is understood to need further attention; which has motivated the development of this research based on the following question: what is

the association between the publication of sustainability report and the performance of Brazilian public companies?

Accordingly, this study the general purpose of this study is to analyze the association between the publication of a sustainability report and the performance of Brazilian public companies. To that end, the specific objectives are as follows: i) to collect data in the *Economatica* base referring to the characteristics of the company, as well as in the Report or Explain reports published by B3 with regard to the list of companies that publish sustainability reports; ii) use statistical techniques (descriptive statistics, difference of averages and correlation tests) to analyze data collected.

#### 2 LITERATURE REVIEW

According to Laskar (2018), the objective of sustainability is to keep the social solidarity, to protect the environment and to assure the economic development in a balanced way. With the increasing concern from society with economic, social and environmental issues, companies are propelled by *stakeholders* to present good performance in these three aspects, and the sustainability report is the means by which this performance is communicated. In this sense, this section addresses studies that assessed the drivers of social and environmental disclosure, encompassing matters such as profitability, corporate governance, cost of capital, results management, among others. Works were selected through searches in the Google Scholar database using the following key words: social and environmental accounting, sustainability report and disclosure, both in the Portuguese and English languages.

When adopting a social and environmental approach, companies are driven by different stimulus and contextual factors. Among the motivations thereto are: competitiveness, that is, the possibility to obtain sustainable competitive advantage and, therefore, increase profitability from social and environmental actions; legitimation, consisting of the companies' willingness to adapt its actions to the set of norms, regulations, values, beliefs, among other aspects intrinsic to the environment in which it is inserted; and finally, the ecological responsibility, which causes companies to watch out for their values and obligations towards the social well-being. It is worth mentioning that such drivers are influenced by contextual factors, such as: the materiality of the issue, that is, to which extent a certain ecological issue is significant to the company *stakeholders*; the cohesion of the interorganizational environment, which refers to the intensity of interactions and the relationship between companies within the environment; and the personal concern of members of the company with social and environmental issues (Bansal & Roth, 2000).

However, the ground for companies to voluntarily disclose environmental information in their annual reports relate to variables regarding the corporate governance, the segment and the country where the company is established. Halme and Huse (1997), after assessing the data of large companies from four different European counties (namely: Finland, Norway, Spain and Sweden), have found empirical evidence that the greater the dispersion of ownership and control structure and the number of board members, the greater the company's concern with disclosing environmental information in its reporting. The authors have also found that companies within segments whose operations – given its nature – degrade or pollute the environment, as well as companies from countries whose significant share of the Gross Domestic Product (GDP) arise from recognized polluting activities, present better-quality and broader environmental information in their annual reports.

According to Dienes, Sassen and Fischer (2016), the behavior of companies regarding the publication of the sustainability report depends on the requirements specific to the environmental and corporate scenario the company is inserted. For example, for companies directly involved with environmental matters due to the nature of their operation, publishing sustainability reports may represent a common action, as the disclosure of a sustainable performance, in this case, tend

to be an industry practice and an expectation of society. It is worth highlighting that Dienes *et al.* (2016) further indicated some main drivers of sustainability reporting, among which the following stand out: capital structure, media visibility and company size.

Stolowy and Paugam (2018) report a significant increase in the number of non-financial reports published by companies. To substantiate this statement, the authors have indicated data according which the percentage of companies listed on the two main market indexes in the US and Europe that published sustainability or corporate social responsibility reports from 2002 to 2015, rose from 5% to 77%. The most significant changes regarding the publication of the reports were observed in the year of 2007, when the guidelines of the *Global Reporting Initiative* (GRI) were issued thus increasing the percentage of companies that published it from 13% to 47%.

In contrast, the mere publication of environmental information in the company's report does not necessarily represent changes in its processes, methods and objectives towards a social or environmentally responsible operation. Some companies may disclose socio-environmental reports only to meet social expectations, cases in which social or environmental issues are manipulated in order to meet previously established corporate objectives, not the contrary. This happens also because the structure for dissemination of information on the companies' focus on disclosing the financial and economic performance. Unlike financial information, there are no specific rules for disclosing the social and environmental performance of companies or for independent auditors to assess the reports accordingly (Buhr, 2002).

From the critical perspective on the corporate social responsibility reports, Michelon *et al.* (2015) examined symbolic and substantive elements of three socio-environmental report disclosure practices of 112 companies listed on the London Stock Exchange in the period from 2005 to 2007, namely: the publication of a single report, the use of GRI guidelines and the use of guarantees for information published, so as to assess whether or not these aspects would imply a better-quality *disclosure*. The results of the research indicated that all three socio-environmental report disclosure practices do not contribute to a better-quality *disclosure*. That is to say, the disclosure of socio-environmental reports tends to represent more a symbolic than a substantive element.

Nevertheless, Magness (2006) has demonstrated that when external *stakeholders* have the power to put pressure on companies, those that adopt an active strategic approach present better *disclosure* practices regarding socio-environmental responsibility. To reach this conclusion, Magness (2006) conducted regression analysis considering disclosure indexes and the number of press releases issued by gold mining companies in Canada, in 1995; the same year a major environmental accident occurred in the Canadian mining industry. Thus, disclosure indexes represented a measure for the disclosure of socio-environmental information in accounting-financial reports, and press releases reflected the companies' strategic position in response to the demands of external stakeholders for information about the environmental disaster and its implications for the company. The test results indicated a positive relationship the publication of press releases and disclosure.

Disclosing corporate social responsibility activities may also positively affect the cost of capital. That was the conclusion by Dhaliwal, Li, Tsang and Yang (2011) after examining data from 213 US companies from 1993 to 2007. From the literature review, the authors theorize that if disclosing practices of corporate social responsibility could contribute to reducing the cost of capital, companies would have the incentive to disclose such information in their reports, especially those with high cost of capital. In addition, the disclosure of corporate social responsibility activities would imply the reduction of such cost. Dhaliwal *et al.* (2011) tested this hypothesis and found empirical evidences that the cost of capital of the company in the previous year is positively related to the *disclosure* of social responsibility information in the following year. Accordingly, the findings suggested that the disclosure of these information is, indeed, associated to the subsequent reduction of the cost of capital.

Fatemi, Glaum and Kaiser (2017) investigated the relationship between the strengths and weaknesses of a company in terms of social, environmental and governance factors and the value of the company, as well as the moderating effect of the disclosure of these elements in said relationship. Analyzing the data from 403 US companies between 2006 and 2011 (totaling 1,640 observations), the authors found evidence that good social, environmental and governance practices adopted by companies lead to an increase in the companies' value, while bad conducts compromise the companies' value, reducing it. The effect of disclosure on the relationship has ranged according to the conduct of the organization. When the company has sound social, environmental and governance practices, the disclosure of these elements mitigates its relation to value. The possible justification for this finding is because the market could interpret the disclosure of social, environmental and governance factors to justify excessive investments in these activities. When such practices are weak, on the other hand, the disclosure of these elements has a positive effect on value. Fatemi et al. (2017) argue that this may occur because the disclosure helps to legitimate the negative behavior of the company in this regard, thus explaining to investors the consequences of the company's operations and policies, or even due to the greater credibility arising from the disclosure of information.

Sun, Salama, Hussainey and Habbash (2010) examined whether the management of results based on discretionary accruals has any effect on the disclosure of corporate environmental practices, as well as the impact of corporate governance mechanisms on this relationship. The study sample comprised data from 245 UK non-financial companies in 2007, which were analyzed based on regressions estimated by the ordinary least squares method with robust standard errors. Among the results found by Sun et al. (2010), the association between environmental disclosure and the management of results was not statistically relevant. However, after evaluating the corporate governance mechanisms, specifically the size of the board of directors and the diligence of the audit committee, the authors found evidence that the relationship between environmental disclosure and management of results is affected by the diligence of the audit committee.

In a broader study, Martínez-Ferrero, Garcia-Sanchez and Cuadrado-Ballesteros (2013) studied 747 non-financial companies from 25 countries in the period between 2002 and 2010, aimed to assess the relationship between quality of financial information and disclosure of corporate social responsibility information. Besides the management of results used by Sun et al. (2010), Martínez-Ferrero et al. (2013) further considered accounting conservatism and the quality of accruals (Dechow-Dichev and Ball-Shivakumar financial and accounting models) as proxies for the quality of financial and accounting information. In general, the results of the research suggest the existence of a positive and statistically significant relationship between the quality of financial and accounting information and the voluntary socio-environmental disclosure. That is to say, the quality of the financial and accounting information in the financial reports of companies positively affects the level of socio-environmental disclosure.

Baldini, Maso, Liberatore, Mazzi and Terzani (2018), with data from companies of several countries in the period between 2005 and 2012, have evidenced that socio-environmental *disclosure* practices are affected by characteristics of the company and national aspects. Among the results, it is worth noting that, in the country, corruption showed a negative relationship with socio-environmental disclosure. The justification for this finding was that companies that adopt unethical practices would tend not to disclose. The unemployment rate, in turn, was positively related to socio-environmental disclosure. The authors claim that the disclosure could be used as a tool to attract talented professionals, on the grounds that people aiming at prosperous career opportunities would take socio-environmental information into consideration when choosing a company to work. In general, the characteristics of the company presented a positive relationship with socio-environmental disclosure. These variables include leverage, size, profitability, analyst coverage, among others.

Regarding the evidences indicated in the Brazilian literature, Braga, Oliveira and Salotti (2009) evaluated the influence of certain variables – among which stand out the size, the performance and the indebtness of the company – on the environmental disclosure in financial statements of Brazilian companies. Based on the data from a sample consisting of 108 listed companies from the ranking prepared by the magazine *Exame Melhores e Maiores* of 2007, Braga *et al.* (2009) indicated empirical evidences suggesting that the size of the company, the wealth generation and field of activity have a direct impact on the level of environmental disclosure. Some variables, however, such as performance and indebtness, did not significantly affected the environmental *disclosure*.

Similar, Rover *et al.* (2012) studied the drivers of the volunteer environmental disclosure by Brazilian companies classified as potentially polluting. The sample included publicly traded companies with stocks listed on B3, that published Standard Financial Statements or Sustainability reports between 2005 and 2007, whose economic activities have a high environmental impact; corresponding to 57 companies. Among the initial assumptions brought by the article, Rover *et al.* (2012) support the hypothesis that larger companies with better return on assets and higher indebtness would disclose more environmental information. The results of the research corroborate only the hypothesis of a positive relationship between the Company size and the environmental disclosure. The results for the relationship between the profitability and the indebtness with the *environmental disclosure* were inconclusive.

Conceição, Dourado, Baqueiro, Freire and Brito (2011) in turn, investigated CSR's level of performance disclosure, as well as its relationship with economic, financial and social performance, using data from the financial statements of Brazilian companies listed on Bovespa. After analysis, the authors found empirical evidence that the disclosure of CSR elements is mainly driven by the economic, financial and social performance, for companies in the sample engaged in unregulated activities (not regulated and controlled by regulatory agencies); for regulated companies the results were inconclusive.

Calixto (2013) analyzed the content of the social and environmental information published by 226 Latin American companies, based on data collected from 2004 to 2009, in order to analyze social and environmental information in the reports and compare companies from different countries. The findings of the study show that most companies studied did not provide relevant socioenvironmental information in their published reports, and Brazilian companies presented the highest levels of disclosure in this regard. Among the means used to disclosure socio-environmental information, the annual report was the main channel used, followed by the sustainability report.

Given the foregoing, the evidences of the benefits of social and environmental disclosure is mixed. On the one hand, works like Dhaliwal et al. (2011), Martínez-Ferrero et al. (2013), Baldini et al. (2018) suggest that the publication of reports with social and environmental information is associated to a better quality of accounting and financial information, lower cost of capital and higher profitability. On the other hand, there are inconclusive studies on the advantages of publishing reports to the performance of the company, such as Braga et al. (2009), Rover et al. (2012) and Michelon et al. (2015). Thus, this research contributes by providing additional evidence of the association between the publication of sustainability report and the performance of Brazilian public companies. This work also stands out by proposing a specific analysis of the sustainability report, considering that the effects of the social and environmental disclosure arising from each report cannot be determined when considering different publications in the sample.

#### 3 METODOLOGY

Considering the objective to analyze the association between the publication of the sustainability report and the performance of Brazilian public companies, this study can be classified as a descriptive research. According to Gil (2002), descriptive research has the main purpose of describing the characteristics of phenomena or populations, establishing relationships between variables. In addition, among the main aspects involving this type of research is the use of standardized techniques of data collection.

As regards approach, this study is characterized as a quantitative research, since statistical instruments were used in order to reach a numerical representation. This understanding is in line with Fonseca (2002), who supports that research with quantitative approach is that whose results can be quantified, besides assuming these are a real representation of the entire target population, since samples are normally large and considered to be representative of the population. Fonseca (2002) still argues that quantitative research uses mathematical language to describe the relationship between variables or causes of a phenomenon.

As regards data collection, data on the publication of the sustainability report of Brazilian public companies listed on B3 were collected, which can be verified in the report "Report or Explain" of the stock exchange itself, in the period between 2012 and 2016. Furthermore, Economatica was used to collect data regarding the performance of companies analyzed hereunder (measured by the return on assets), as well as other variables, which Braga et al. (2009), Rover et al. (2012), Dienes et al. (2016) and other authors mentioned hereunder, have demonstrated to be the drivers behind the publication of the sustainability report or the disclosure of environmental information, namely: the company size (measured by the natural logarithm of the total assets) and the capital structure (measured by debt-to-equity ratio).

The sample of the study included all Brazilian companies listed on B3 – except those of financial nature, due to their accounting specificities –, with data available in the period between 2012 and 2016, corresponding to 1,889 observations. The sample period was chosen based on the availability of the database with the companies' responses to the initiative "Report or Explain for Integrated or Sustainability report", carried out by B3 in partnership with the Global Reporting Initiative (GRI).

The statistical method was used for the analysis of the data collected. According to Gil (2008), this method is based on the application of the probability theory, representing an important aid for research in social research. The author further states that the statistical method is well accepted by researchers with quantitative concerns, since the explanations arising therefrom have a good probability of correctness and a reasonable level of precision. Among the statistical techniques used in this study, the descriptive measures (average, standard deviation, minimum and maximum), the tests for the difference of averages and the correlation analysis should be highlighted.

Finally, the treatments and tests that supported the statistical choices hereof should also be addressed. First, the variables were "winsorized" (the value considered for the winsorizing procedure was 0.025) in order to treat the *outliers*. To assess the homoscedasticity the test of Levene was conducted, which identified heteroscedasticity in the variables studied hereunder. Therefore, test t for the difference of averages was made assuming unequal variances. Similarly, in the absence of homoscedasticity, the Spearman's rank correlation coefficient was used for the correlation analysis between the variables. Tests were performed using software Stata version 13.

### **4 RESULTS**

Table 1 presents descriptive statistics (average, standard deviation, minimum and maximum) for the variables studied hereunder. The number of companies observed in the period from 2012 to 2016 amounted to 1,889. Among the companies in the sample, 31.5% provided a sustainability report. As regards profitability, the return on assets presented an average of -19.85%. For the variable size, measured by the natural logarithm of the asset, the average was approximately 13.88. Finally, the companies' debt-to-equity ratio was 1.80 on average.

Table 1 **Descriptive statistics for the variables studied hereunder** 

Variable	# obs.	Average	D.P.	Min.	Max.
sust	1889	0.3150	0.4646	0	1
roa	1889	-0.1985	0.8457	-4.6377	0.2149
lnatv	1889	13.8834	2.9116	4.4062	17.9731
alav	1889	1.8005	3.4307	-5.4900	14.4038

**Note.** sust = dummy variable for the disclosure of the sustainability report, scoring 1 when the company discloses a sustainability report and 0 if not; roa = return on assets obtained from the ratio between the net income and the total assets; lnatv = the company size obtained from the natural logarithm of the total assets; alav = the financial leverage obtained from the debt-to-equity ratio.

According to Table 2, companies that published sustainability report recorded better ROA averages than the others, corresponding to an average 3.11% for companies that disclosed the sustainability report and -30.40% for the remaining companies. Similarly, companies that published sustainability report also recorded better averages for financial leverage and size. It is worth noting that the differences in the averages for these variables (return on assets, size and financial leverage) between the companies reporting the sustainability report and the remaining companies were statistically significant, at the 1% level.

Table 2 differences in the averages of companies that published and those that did not publish sustainability reports

Variable	# obs.	Average	Error	D.P.	t	sig.
roa						
sust = 0	1.294	-0.3040	0.0279	1.0026	-11.9200	0.0000
sust = 1	595	0.0311	0.0037	0.0899		
lnatv						
sust = 0	1.294	13.0280	0.0837	3.0102	-26.3301	0.0000
sust = 1	595	15.7435	0.0603	1.4704		
alav						
sust = 0	1.294	1.6009	0.0987	3.5509	2.0202	0.0001
sust = 1	595	2.2347	0.1276	3.1126	-3.9293	0.0001

**Note.** sust = dummy variable for the disclosure of the sustainability report, scoring 1 when the company discloses a sustainability report and 0 if not; roa = return on assets obtained from the ratio between the net income and the total assets; lnatv = the company size obtained from the natural logarithm of the total assets; alav = the financial leverage obtained from the debt-to-equity ratio. As the Levene test indicated the existence of heteroscedasticity, the t test was used for the difference between the averages assuming unequal variances.

In Table 3, Spearman's rank correlation coefficient for the relationship between the publication of the sustainability report and return on asset was 0.2341. This suggests that, although poor, there is a positive association between these variables. Likewise, company size

and leverage are positively associated with the publication of the sustainability report, with coefficients of 0.4971 and 0.1874, respectively. Thus, the performance, size and leverage of the company increase as the occurrence of publication of the sustainability report increases. Nevertheless, it should be mentioned that this is not a causal relationship, that is, changes to a certain variable do not necessarily change another variable.

Table 3
Correlation matrix for the variables studied hereunder

Variable	# obs.	sust	roa	lnatv	alav
sust	1.889	1.0000			
roa	1.889	0.2341*	1.0000		
lnatv	1.889	0.4971*	0.2504*	1.0000	
alav	1.889	0.1874*	0.0894*	0.4627*	1.0000

**Note.** sust = *dummy* variable for the disclosure of the sustainability report, scoring 1 when the company discloses a sustainability report and 0 if not; roa = return on assets obtained from the ratio between the net income and the total assets; lnatv = the company size obtained from the natural logarithm of the total assets; alav = the financial leverage obtained from the debt-to-equity ratio. As the Levene test indicated the existence of heteroscedasticity, the Spearman's rank correlation coefficient was. \*significant at the level of 1%.

Based on the results above, better performing companies, which are larger in terms of total asset and financially leveraged, are more likely to publish sustainability reports. A possible explanation for these findings is that large, profitable and leveraged companies tend to have more resources available to invest in voluntary reporting, such as the sustainability report.

It should be further mentioned that evidences recorded hereunder corroborate arguments presented in previous correlated researches regarding the positive association between the performance of a company and the sustainability report, as well as the other drivers of said reporting (company size and financial leverage). Some of these researches are: Jones et al. (2007), on the association between the sustainability report and a series of attributes of Australian companies' financial and market performance; Braga et al. (2009), on the influence of company size on environmental disclosure; Baldini et al. (2018), on the drivers of social and environmental disclosure of the company and the country; among other studies addressed in the course of this article.

# **5 CONCLUSIONS**

This study aimed to analyze the association between the publication of the sustainability report and the performance of Brazilian public companies. Data were collected on the publication of the sustainability report of Brazilian public companies listed on B3, available in the initiative "Report or Explain" of the stock exchange itself. Data for other variables on the characteristics of the company, such as performance, size and leverage, were collected from Economatica. Thus, the sample of the study included all Brazilian public companies listed on B3 - except those of financial nature, due to their accounting specificities -, with data available in the period between 2012 and 2016, corresponding to 1,889 observations.

The results show that companies that publish sustainability reports have better averages for performance (return on assets), size (natural logarithm of the asset) and financial leverage (debt-to-equity ratio) compared to companies that did not published such report. This difference was statistically significant. In addition, the Spearman correlation coefficients for the variables studied hereunder, among other aspects, indicated a positive and statistically significant association between the publication of the sustainability report and the performance, size and leverage of the company.

The findings of this research may contribute to the literature and to the progress of studies on the matter. First, this paper presents new evidence related to the Brazilian market regarding the main drivers of sustainability reporting (company size, performance, and capital structure), widely indicated in international surveys. In addition, analyzing the results hereof, the profile and main characteristics of companies that are more likely to sustainability reporting can be outlined, in order to stimulate discussions on voluntary publications by Brazilian companies.

Despite the contributions of this study, some limitations were also observed in the course of the research. For the classification of companies as to the publication of sustainability reports, the companies' responses indicated in the document issued by B3 were used, namely "Report or Explain for Integrated or Sustainability report". Therefore, the fact that a company did not express in the "Report or Explain" does not necessarily mean that it did not publish a sustainability report for the period. In addition, companies may disclose social and environmental information by other means, in their annual report or even in their management report for instance, which was not considered in this survey.

Future studies are suggested to analyze the quality of information published in the sustainability reports, that is, to verify whether the social and environmental aspects disclosed are relevant to the company's stakeholders. Moreover, in order to broaden the results of this study, it is recommended to replicate them with measures different from those used hereunder for the performance, size and capital structure of companies. Finally, using samples with companies from other countries may help understanding the drivers of sustainability report publication in foreign markets.

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