Sustainability-Oriented Innovation and CSR: A Quantitative Research in Brazilian Multinationals

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Resumo

The purpose of this study is to analyze the relationship between Sustainable-Oriented Innovation and Corporate Social Responsibility (CSR) in Brazilian multinationals. The theoretical framework provides relevant information on CSR and Sustainability-Oriented Innovation (SOI), which are the basis for the development of hypotheses. In order to collect data, an e-survey was conducted with Brazilian multinationals operating in different industries and segments; as result, we obtained 60 valid questionnaires. In order to analyze the data, a multivariate analysis was accomplished, which involved the procedures of canonical correlation and multiple linear regression. The outcomes of the multivariate analysis provided empirical support for five hypothesis: there is a positive correlation between the constructs: i) guidelines for multinationals (defined by OECD and emphasized by several scholars) and the compliance with social and environmental regulation; ii) guidelines for multinationals and CSR as differentiation strategy; iii) compliance with social and environmental regulation and CSR as differentiation strategy; iv) Sustainability-Oriented Innovation (SOI)practices and guidelines for multinationals; and v) Sustainability-Oriented Innovation (SOI) practices and the compliance with social and environmental regulation. The results did not support the hypothesis that predicted a positive correlation between Sustainability-Oriented Innovation (SOI) practices and CSR as differentiation strategy.

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Keywords: Brazilian multinationals. Corporate social responsibility. Sustainability-oriented innovation.

1. Introduction

The main objective of this research is to analyze Corporate Social Responsibility (CSR) and Sustainability-Oriented Innovation (SOI) practices in Brazilian multinationals, considering that this is a critical matter when it comes to the competitive advantage of multinational corporations (Nidumolu, Prahalad, & Rangaswami, 2009; Porter & Linde, 1995).

It is important to contextualize that these Brazilian companies are part of a larger group of multinationals, known as emerging market multinationals, e.g. multinationals originating from emerging markets. Even though Brazil is currently considered the ninth largest economy in the word (World Bank, 2016), behind other emerging markets such as China and India, and ahead of some developed countries like Canada and Australia, and Mexico, a country from which some powerful *multilatinas* arise (Casanova & Fraser, 2009a; Casanova, Fraser & Hoeber, 2009), Brazilian companies still present a cautious and timid behavior when considering their internationalization process (Fleury & Fleury, 2009, 2012, 2014; Borini et al., 2010; Casanova & Fraser, 2009a; Losada-Otálora & Casanova, 2014; Casanova, 2015; Ramamurti, 2012; Melo, 2009, Cyrino & Tanure, 2009, Pattnaik & Kumar, 2014).

As economy, population and companies grow, the society has to deal with the fact that human activities end up causing not only social, but also environmental problems. For a long time, companies have believed that they were supposed to generate profits without minding environmental externalities (Friedman, 1970), so issues related to pollution and degradation of ecosystems ended up being ignored. After a few international summits, such as the United Nations Conference on the Human Environment held in Stockholm in 1972, the Rio de Janeiro Earth Summit in 1992, and the United Nations Conference on Sustainable Development (a.k.a. Rio+20) in 2012, these issues became recurrent and companies and governments started to propose solutions to minimize damages and to prevent the emergence of new ones.

Companies used to believe that investing in social and environmental issues would entail a loss in competitiveness. After all, corporate programs such as recycling and social inclusion always generate costs, which companies were not willing to deal with. Slowly, however, such mindset starts changing; many companies realize that being socially and environmentally responsible may actually bring more profits by turning them into organizations that are more competitive (Porter & Kramer, 2002, 2006; Porter & Linde, 1995; Falck & Heblich, 2007; Campbell, 2007; Carrol & Shabana, 2010). Sometimes such gains come from the better reputation a company acquires, which can turn it into more influent in the business world for embracing sustainability causes; other times companies realize that reducing the use of raw materials with the proper technology may lead to more efficient production processes, which does not only avoid damaging the environment, but also reduces the costs of production, generating profits.

When we consider both CSR performance and Brazilian multinationals, international indexes do not present the best results. According to the world's most sustainable companies index provided by Forbes (Forbes, 2016), from the 50 companies listed, none comes from emerging markets or South America. It is possible to observe that 72% of these companies are European; followed by North American (14%) – only represented by the United States and Canada –; Asian (10%); and Oceanian (4%). Curiously, most of the most sustainable companies operate in the banking and oil, gas and consumable fuels industries; the latter involves not very sustainable activities, considering the extraction of a finite resource plus the pollution linked to discharges of toxic residues. Even though the Brazilian Bank Itaú is considered a responsible institution involved in several social and environmental initiatives (Batista et al., 2005; Casanova & Dumas, 2010), it was not included in the Forbes' index, which can indicate that, not only these particular companies, but other ones have to stand out more in the areas of sustainability and CSR.

It is, however, our objective to explore herein if issues related to CSR in Brazilian multinationals alongside innovability are becoming recurrent in the daily routine of organizations. Said that, our study explicitly addresses this conundrum: "How is the behavior of Brazilian multinationals concerning corporate social responsibility and how does it relate to innovability?" In order to address this question, we integrate Corporate Social Responsibility and Innovability views to develop a model identifying these practices by Brazilian multinationals. We first review the literature on environmental and social issues, multinational corporations, and innovability, followed by propositions, discussions, and conclusion.

1.2 Research issue and objectives

Considering that the adoption of corporate social responsibility (CSR) provides companies with a differentiated identification of their branded products bringing positive results to their trade balance, it is possible to state that such action increases the achievement of markets and becomes an important resource to both local and global competitiveness (Aligleri et al., 2009). One can notice over the past years the emergence of several global initiatives related to social and environmental topics, as, for example, the United Nations Conference on the Human Environment held in Stockholm in 1972, the Rio de Janeiro Earth Summit in 1992, the Earth Charter (1997), the Kyoto Protocol (1997), the United Nations Global Compact (1999), the United Nations Conference on Sustainable Development (a.k.a. Rio+20) in 2012, and the models proposed by the Global Reporting Initiative (GRI). With the evolution of such initiatives, issues related to social and environmental concerns became recurrent, making governments and companies to start proposing solutions to minimize damages and to prevent the emergence of new ones.

Although Brazil does not accomplish long-term perspectives in some market sectors and although the state and the private sectors avoid infrastructure investments which do not provide immediate economic benefits, significant changes through private initiatives can be noticed as, for example, Banco Itaú Holding Financeira S.A., whose responsibilities relate to the reduction of water profligacy, savings of electrical energy, prevention of solid wastes and paper off cuts, reduction in the emission of pollutants, and implementation of important educational and social projects (Batista et al., 2005; Casanova & Dumas, 2010).

There is one specific subject that always emerge when it comes to the adoption of CSR policies and initiatives: are companies responsible because they want to comply with legislation, do they become responsible after getting penalties for breaking rules, or do companies perceive a significant competitive advantage when acting proactively regarding regulatory compliances?

In relation to the Brazilian regulatory system, one can affirm that environmental policies achieved a more active role only from the middle of the 20th century on, as has happened in many countries throughout the world. The development of the Brazilian environmental policy was slow due to inefficient public policies and due to the belief that the environmental protection should not hinder the country's economic growth (Sousa, 2008). Until 1972, the year of the United Nations Conference on the Human Environment (also known as the Stockholm conference), there was in Brazil no concrete environmental policy, but rather policies that resulted in it (Ibid.). The country seemed to be more committed to achieving its projected economic development than to managing its natural and social resources.

Based on the information presented herein regarding the presence of Brazilian multinational corporations abroad, as well as information regarding both social and environmental responsibilities, one may observe that this study is trying to fill a gap in the existing literature on CSR and SOI in Brazilian multinationals operating abroad. This gap in the literature relates to the development of CSR initiatives in multinationals originated from emerging economies, especially when these initiatives are taken in subsidiaries of these multinationals. Welford (2010) emphasizes such statement when affirming that the majority of the research on CSR is much more related to a Western mindset with a Western research focus; very little extends to developing countries.

Innovation itself is a very relevant topic in the entrepreneurial sphere because it is considered a relevant determinant of growth; innovation is an important strategic variable because it acts like a catalyst to companies that want to become leaders in their respective fields (Griffiths & Wall, 2012). The concern about innovation is no recent phenomenon; it dates back to the 1940s, when Schumpeter (1942) started to mention the need to innovate. According to him, changes in the economy entail changes in industries, which tend to disrupt old paradigms in order to create new – and more competitive – ones. In other words, innovation indicates the creation of the new while destroying the obsolete.

Peter Drucker (1969) emphasized the need to create new products in order to create new markets. In that sense, it was necessary to consider all current products obsolete so that new ones could be developed. More recently, Christensen (1997, ref.) raised awareness of disruptive technologies; according to him, in order to pursue innovation, disruptive strategies should be sought instead of revolutionary ones. That way, it would be possible to create new markets by proving simpler – and even cheaper – products.

Academic studies investigate the association between the terms "innovation" and "sustainability" (Boons et al., 2013; Roscoe, Cousins & Lamming, 2016; Iñigo & Albareda, 2016; Franceschini, Faria & Jurowetzki, 2016; Jay & Gerard, 2015; Hansen, Grosse-Dunker &

Reichwald, 2009; Nidumolu, Prahalad & Rangaswami, 2009; Klewitz & Hansen, 2001, among others). In our understanding, the innovation that takes into account sustainable issues may have emerged due to the increase in environmental and social problems worldwide, a stronger competitiveness in most of the industries, in which companies fight for their survival in the market, and the emergence of a new niche, in which this sort of innovation is appreciated.

One can find in the literature examples of authors who refer to this sort of sustainability as "sustainable innovation" (e.g. Boons et al., 2013; Iñigo & Albareda, 2016), and others who refer to it as "sustainability-oriented innovation" (e.g. Klewitz & Hansen, 2011; Hansen, Grosse-Dunker & Reichwald, 2009). We decided to choose the latter in this study, since the term "sustainable" is sometimes not quite clear about what it actually entails and stands for (Veiga, 2005). Such issues related to definitions will be explored in Section 1.5.

The emergence of sustainability-oriented innovation, or SOI, as it will be defined herein, is related to the current competitiveness faced by companies worldwide. Boons et al. (2013) believe that the future competitiveness will be no longer defined by the struggle to remain competitive, but by the creation of new markets underpinned by innovation. In accordance with these authors, the challenges faced in the fields of sustainability can be transformed into business opportunities, creating new global markets, allowing the specialization of some regions and giving governments politically long-term perspectives for policy action. Hansen, Grosse-Dunker & Reichwald (2009) mention that the challenges that sustainability offers can lead to a significant potential for innovations and related business opportunities.

Most importantly, SOIs cannot only focus on social and environmental aspects; they need to be commercially relevant; the triple bottom line used in sustainability definitions is also present in this sort of innovation, since economic, social and environmental goals have to be fulfilled (Jay & Gerard, 2015).

Since innovation is a key factor for companies to remain competitive and to successfully compete in changing markets (Klewitz & Hansen, 2011), and considering that SOIs offer several market potentials while fulfilling economic, social, and environmental goals (Hansen, Grosse-Dunker & Reichwald, 2009, Jay & Gerard, 2015), we decided to analyze in our study the relationship between Brazilian multinationals and SOI, as we consider this aspect to be relevant for such companies.

Considering that all pertinent topics of this research have already been explored in the present section, we will proceed with the presentation of the research objectives. The general purpose of this research is to explore the presence of CSR in Brazilian multinationals operating abroad. We also intend to, therefore, accomplish a descriptive analysis of the results obtained from the variables that measure CSR in Brazilian multinationals. The illustration below demonstrates the main objective of the research by showing the variables related to CSR that our study seeks to cover.

Illustration 1 – General objective of the study

Source: Research data (2020).

In order to improve the visualization of the data and to present the main findings in a more direct way, we decided to turn these variables into constructs. The different colors used in this illustration indicate the three different constructs that cover the part related to CSR.
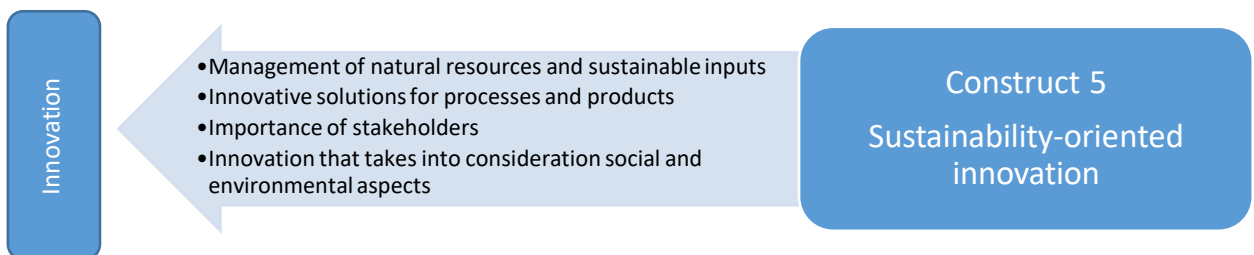
Illustration 2 – CSR constructs
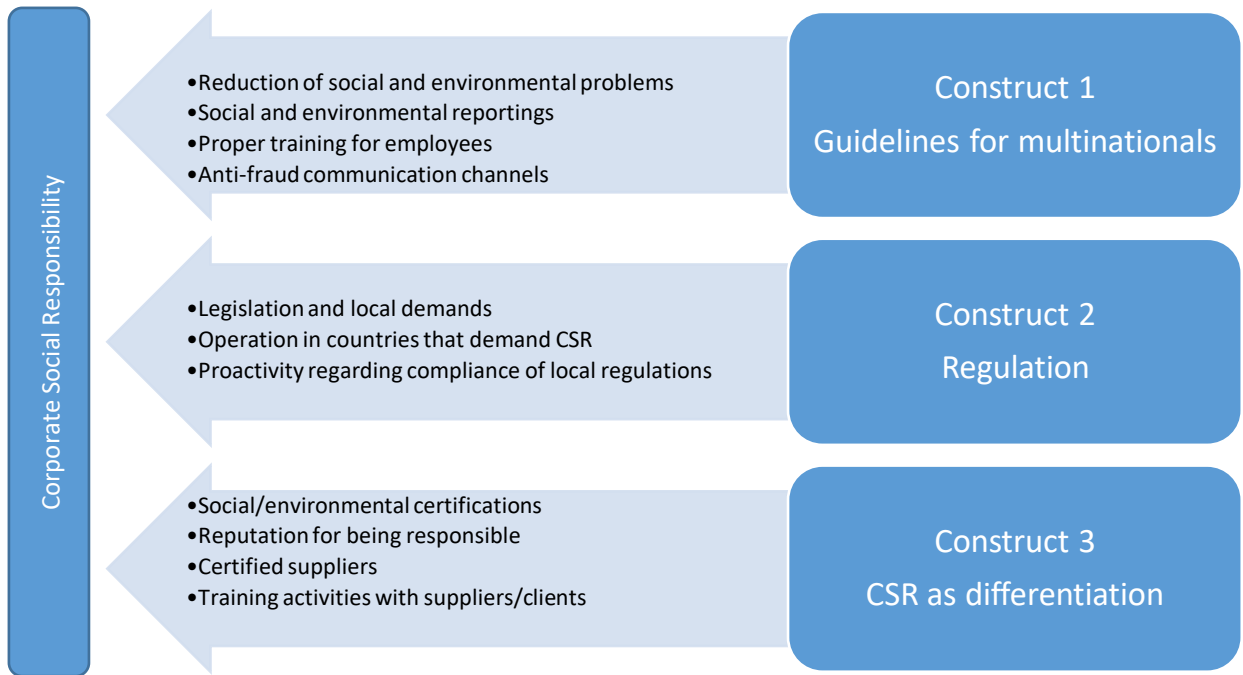
Source: Research data (2020).

With regard to SOI, we developed one construct, which covers three different variables. It is important to mention that such variables were developed based on studies that addressed issues related to sustainability-oriented innovation.

Illustration 3 – SOI construct

Source: Research data (2020).

3.1 Hypothesis

Even though there are several issues to explore regarding Brazilian multinationals given their latecomer characteristics and particular institutional environment (Cyrino & Tanure, 2009; Fleury & Fleury, 2007), we focused our analysis on the social and environmental characteristics that such companies can have when operating abroad through the analysis of CSR. Considering the strategic aspects of CSR (Falck & Heblich, 2007; Cochran, 2007; Porter & Kramer, 2002; Aligleri, Aligleri & Kruglianskas, 2009, Griffiths & Wall, 2012, among others), we recognize there is a gap in the literature regarding CSR accomplishments carried out by emerging market

companies, given that scholars tend to focus the analysis of CSR in developed country companies (Welford, 2010).

In order to address these issues, two were accomplished during this study. The first one focuses on analyzing and exploring the presence of CSR in Brazilian multinationals. Therefore, we developed a theoretical framework that covered the main issues related to CSR, considering that it is an important strategic asset for companies. In consideration of the other step, we divided the variables established in CSR into categories, i.e. constructs. The variables related to SOI were also transformed into a construct. That way, it becomes better for us to illustrate results; both analysis and discussion become, therefore, more dynamic. Based on the Cronbach's alpha presented by each variable – such matter will be explored with further details in Section 4 – it was possible to group CSR variables into three distinct groups.

The first group, called herein Guidelines for multinationals, incorporates not simply the guidelines proposed by OECD (2011) when suggesting basic directions and instructions for multinationals to behave in responsible ways. It is important to point out we did not simply replicate and reproduce the guidelines elaborated by OECD (2011); we chose certain affirmations that were also supported by scholars and researchers approached in the literature review. The second group, known as Regulation, involves three variables directly related to the presence of regulation and norms in the countries in which Brazilian companies operate. The third and last group, CSR as differentiation, brings three variables used in a previous study accomplished by Boehe and Cruz (2010) and one variable developed by Pinto, Oliveira Jr and Borini (2013) when analyzing the importance of CSR as a relevant strategic differentiation feature and the development of CSR by subsidiaries of foreign multinationals in Brazil, respectively.

We aim to analyze, nevertheless, the relationship between CSR and SOI as well. Considering that CSR is actually constituted by three different constructs, four variables constitute the variable SOI. In order to create such construct, the Cronbach's alpha was also analyzed and presented satisfactory results. The variable SOI involves issues related to the management of natural resources, innovative solutions, importance of stakeholders, and social and environmental aspects when considering innovation.

We believe that grouping the variables into constructs was a good method to present results and to elaborate hypotheses, since it is clear for the reader what we intend to research and how we intend to approach it. We will describe below each of the hypothesis we intend to address in this study.

3.2. Synthesis of the hypotheses

In order to illustrate the hypotheses developed in our study, we elaborated the table below. In the table, it is easier and clear to perceive what each one of the hypothesis analyzes and what it stands for.

Table 1 - Hypotheses of the study

	Hypothesis
CSR and Brazilian multinationals	H1: The more Brazilian multinationals follow the guidelines for multinationals, the more they comply with CSR regulations.

	H2: The more Brazilian multinationals follow the guidelines for multinationals, the more they consider CSR as a differentiation strategy.
	H3: The more Brazilian multinationals comply with CSR regulations, the more they consider CSR as a differentiation strategy.
Guidelines for multinationals and SOI	H4: The more Brazilian multinationals develop SOI, the more they follow the guidelines for multinationals.
Compliance with regulations and SOI	H5: The higher the development of SOI by Brazilian multinationals, the higher the compliance with CSR regulations.
CSR as differentiation and SOI	H6: The more Brazilian multinationals develop SOI, the more they tend to consider CSR as a differentiation strategy.

Source: Research data (2020).

4. Methodology

We decided to conduct a survey in our study in order to describe both behavior and characteristics of Brazilian multinationals regarding CSR and SOI. According to Babbie (2001), the conduction of surveys in academic studies present several benefits: the data obtained enables logical thinking; samples used in surveys can indicate the behavior of a certain population; explanatory analysis in survey researches aim to develop general propositions on human behavior; surveys provide greater understanding by using a small number of variables, among others.

We identified that there are currently 287 Brazilian multinationals. This number represents the population of the study. This number of companies does not come from any sort of official or government report; we reached this amount during several researches accomplished through some documents provided by FDC, Revista PIB and Observatório das MNC brasileiras[i]. The survey approached, however, only 62 companies.

The 62 companies that answered our survey represent 20.9% of the population. After eliminating questionnaires with missing data, we reached the number of 60 companies.

The questionnaire had 75 questions in total, divided into six different sections. As an instrument of measurement and collection of quantitative data, we used a Likert scale, in which affirmations are drawn and for each one of them the individual has to express their reaction by choosing one of the five-point items (Sampieri et al., 2006). In our case, the scale goes from 'strongly disagree' to 'strongly agree'.

We used the Cronbach's alpha to estimate the reliability of the test. Cronbach's alpha is defined as a reliability measurement that varies from 0 to 1 – the values between 0.60 and 0.70 are considered the lower limit (Hair Jr et al., 2009). In exploratory researches, Hair Jr et al. (2009) affirm that 0.60 is an acceptable number. Considering our research has an exploratory focus for handling correlations that have not been studied yet, 0.6 is an acceptable value. Table 2 demonstrates the Cronbach's alpha of the constructs.

Table 2 - Cronbach's alpha of the constructs

Construct	Cronbach's alpha
Guidelines for multinationals	0.794
Regulation	0.752
CSR as differentiation	0.710
SOI	0.850

Source: Research data (2020).

As one can see, SOI is the construct that presents the best result (0.850) considering that 0.850 closer to 1. The second best result is represented by Construct 1, Guidelines for Multinationals (0.794), followed by Construct 2 (0.752), Regulation, and Construct 3 (0.710), CSR as Differentiation.

5. Presentation and analysis of results

We will provide in this section implications for the hypotheses, e.g. if there is empirical support as result of the multivariate analysis to reinforce their relevance in the academic and managerial spheres. Even though the coefficients provided by the multiple linear regression are important for the empirical support of some hypotheses, the procedure of canonical correlation was also responsible for providing empirical support for other hypotheses.

The canonical correlation indicates the strength of the relationship between two variables individually, while the multiple linear regression studies the relationship between one dependent variable and other independent variables simultaneously. On the one hand, considering that Hypothesis 1, 2 and 3 involve the direct measurement between variables individually, the results provided by the canonical correlation were sufficient to give support for these hypotheses. On the other hand, Hypothesis 4, 5, and 6 involve the relationship among independent variables simultaneously, which demands for the outcomes from the regression analysis.

5.3.1 Hypothesis 1

As stated in Section III, one of the purposes of this study was to analyze the relationship among CSR variables. We considered important to analyze the relationship between the guidelines for multinationals, which is a construct developed herein based on assumptions and implications accomplished by OECD (2011), Gonçalves-Dias and Teodósio (2011), Bertoncello and Chang Jr (2007), Griffiths and Wall (2012), Lassere (2012), Ako (2013), and Rathert (2016), and other variables related to CSR.

The first relationship we wanted to approach was the correlation between Construct 1, Guidelines for Multinationals, and Construct 2, Regulation. Therefore, Hypothesis 1 was created.

H1: The more Brazilian multinationals follow the guidelines for multinationals, the more they comply with CSR regulations.

According to the results presented by the statistical analysis, the correlation between these two constructs is relevant (0.738). That way, it is possible to infer that changes occurring in one variable can implicate in changes occurring in the other one. In other words, the more Brazilian multinationals follow the guidelines for multinationals, they more likely they are to comply with CSR regulations.

5.3.2 Hypothesis 2

As in Hypothesis 1, the second hypothesis of the study could be proved by the results of the canonical correlation. In this case, the purpose was to analyze the correlation between Construct 1, Guidelines for Multinationals, and Construct 3, Differentiation.

H2: The more Brazilian multinationals follow the guidelines for multinationals, the more they consider CSR as a differentiation strategy.

The results provided by the canonical correlation analysis (0.727) indicate a positive correlation between these two constructs. That way, one can conclude that Brazilian multinationals that follow the guidelines proposed herein are more likely to consider CSR as a differentiation strategy.

5.3.3 Hypothesis 3

The third hypothesis is the last one that could be confirmed through the procedure of canonical correlation. Due to the relevance given to the compliance with regulation and the acknowledgement that CSR can be a differentiation strategy that provides the company with a competitive advantage (Boehe & Cruz, 2010; Pinto, Oliveira Jr & Borini, 2013), Hypothesis 3 was developed.

H3: The more Brazilian multinationals comply with CSR regulations, the more they consider CSR as a differentiation strategy.

The coefficient provided by the canonical correlation was considered relevant (0.630), which indicates that Hypothesis 3 had empirical support. It is, therefore, possible to assume that Brazilian multinationals that comply with CSR regulations are more likely to consider CSR as a differentiation strategy. It is important to point out that many scholars (Campbell, 2007; Porter & Linde, 1995; Carroll & Shabana, 2010) indicate that the compliance with regulations can also provide the company with a competitive advantage, considering that proactive companies and companies that follow regulations are ahead of competitors and more prepared to deal with adversities.

5.3.4 Hypothesis 4

For the analysis of the following hypothesis, the use of the results of the canonical correlation were not used. The canonical correlation indicates the interaction, e.g. the relationship, between two variables when analyzed separately. Our purpose was, however, to analyze the relationship between independent variables concomitantly; therefore, the use of multiple linear regression was necessary.

The first relationship we wanted to analyze was the influence that Construct 1, Guidelines for Multinationals, had over the dependent variable, SOI, when analyzed with the other independent variables.

H4: The more Brazilian multinationals develop SOI, the more they follow the guidelines for multinationals.

The coefficient provided by the multiple linear regression was significant (0.009), which indicates a positive relationship between SOI and GM. That way, it is possible to affirm that these variables are directly and proportionally related. This outcome indicates that the company might not develop SOI in an isolated way; the company involved in sustainability-oriented innovation is also involved with the guidelines for multinationals, which indicate several issues related to CSR (e.g. alleviation of the impacts of activities and investment in antifraud channels).

5.3.5 Hypothesis 5

The result provided by the multiple linear regression indicate a positive relationship between SOI and Regulation (0.023 < 0.05). It is possible to affirm, therefore, that Brazilian multinationals involved in SOI issues are more likely to comply with CSR regulations.

H5: The higher the development of SOI by Brazilian multinationals, the higher the compliance with CSR regulations.

Such outcome may be related to what Porter & Linde (1995) proposed when addressing the issue of innovation and environmental concern: innovation is vital and environmental concern is necessary to emphasize competitive advantages. That way, companies involved in SOI are more likely to acknowledge the competitive aspect of regulations.

5.3.6 Hypothesis 6

The last hypothesis of the study tried to relate the variables SOI and Differentiation. Unlike the other variables analyzed in the multiple linear regression analysis, this correlation was the only one not considered significant (0.547>0.05).

H6: The more Brazilian multinationals develop SOI, the more they tend to consider CSR as a differentiation strategy.

The absence of empirical support for such variable also brings important insights for the study. The first implication is the possibility that Differentiation is not the most proper variable to explain or to influence the behavior of SOI. As noticed in the descriptive analysis of the study, variables related to suppliers were not very well rated by respondents, which might have had implications in this specific regression analysis.

5.3.6 Synthesis

Most of the hypotheses we wanted to test had empirical support; only one, related to SOI and Differentiation, could not be empirically supported. It is, however, possible to provide a ranking to indicate which set of variables can be considered the most relevant ones . For the first three hypotheses, in which the procedure of canonical correlation was used, the most significant relationship was between GM and Regulation (0.738), followed by GM and Differentiation (0.630), and, finally, Regulation and Differentiation (0.630).

For the other hypotheses, in which the procedure of multiple linear regression was applied, the ranking would be, in descending order: SOI and GM (0.009) and SOI and Regulation (0.023). The relationship between SOI and Differentiation was considered insignificant (0.547>0.05). The table below indicates the synthesis of the results for the hypotheses.

Table 3 - Results for hypotheses

Hypothesis	Result
Hypothesis 1	Empirical support provided
Hypothesis 2	Empirical support provided
Hypothesis 3	Empirical support provided
Hypothesis 4	Empirical support provided
Hypothesis 5	Empirical support provided
Hypothesis 6	No empirical support provided

Source: Research data (2020).

6. Conclusion

In terms of achieving the objectives we proposed in the initial part of the study, it is possible to affirm we accomplished our goals. The general objective of the study was to analyze the presence of CSR in Brazilian multinationals, which was carried out herein. The descriptive statistics provided by our analysis indicate positive results in terms of CSR; when considering the mean of the constructs that indicate the answers of the interviewees in the Likert-scale, relevant figures can be observed. As Table 32 indicates, the mode for Guidelines for multinationals was 4; the mode for Regulation was 5; for CSR as differentiation, 3. Considering the mode indicates the result that repeats more frequently, the results can be considered very satisfactory – keeping in mind that in the Likert-scale, the item 5 indicates more consistency of results.

This outcome itself is already a good indicator for Brazilian multinationals. As it has been pointed out by Steiner and Steiner (2000), in Latin America there is no natural sense of responsibility and, in that case, foreign multinationals from developed countries are the ones that have to take care of sustainability, e.g. CSR, issues. The outcomes provided by our study already proves such statement wrong. Besides, it is important to remember that Brazilian multinationals are latecomers in terms of internationalization (Pattnaik & Kumar, 2014; Cyrino & Tanure, 2009; Fleury & Fleury, 2007) and also in terms of CSR – in accordance with Casanova and Dumas (2010), it was only in the end of the 1990s that multilatinas started to engage in CSR issues.

The descriptive analysis also indicates interesting results for Brazilian multinationals. Most companies of the sample are headquartered in the State of São Paulo; and, in terms of regions, most of the headquarters are located in the Southeast region. The difference between companies headquartered in São Paulo and in the Southeast region is very discrepant from the other regions and states. There was, for instance, no multinational company headquartered in any of the Northern States of Brazil. Such outcome indicates a concentration in the localization of these companies, which prefer to be located in more populous regions and closer to industrial areas.

The specific objectives of the research were also accomplished. Through the multivariate analysis procedures, it was possible to explore the relationship between CSR and SOI in a broader sense. Singly, the relationship between GM and SOI, for instance, is significant, which implicates that companies that are more in accordance with the guidelines for multinationals are also the ones that tend to adopt SOI. When analyzing the relationship between SOI and CSR as differentiation, one can observe that companies that adopt SOI are more likely to consider CSR as a differentiation strategy. The positive correlation between SOI and Regulation implicates that companies involved with SOI are more likely to comply with the regulation.

These outcomes were very relevant for the research and indicate the fulfilment of all objectives proposed herein. Besides developing objectives, we also proposed to test some hypotheses that related CSR and SOI. The first three hypotheses are not related to SOI; they implicate a possible relationship among CSR constructs (GM, Differentiation and Regulation). That way, the first hypothesis predicted a positive correlation between GM and Regulation. The correlation between these two constructs was relevant, which indicates that the more Brazilian multinationals follow the guidelines for multinationals, the more they tend to comply with CSR regulations.

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[i] These citations are not present in the references; there are no official documents published by these entities with regard to the number of Brazilian multinationals.

[ii] According to the American Psychological Association (APA).