The influence of social disclosure on the relationship between Corporate Financial Performance and Corporate Social Performance*

Editinete André da Rocha Garcia
Universidade Federal do Ceará, Departamento de Contabilidade, Fortaleza, CE, Brazil
Email: editinete@ufc.br

José Milton de Sousa-Filho
Universidade de Fortaleza, Programa de Pós-Graduação em Administração de Empresas, Fortaleza, CE, Brazil
Email: miltonsousa@unifor.br

João Maurício Gama Boaventura
Universidade de São Paulo, Faculdade de Economia, Administração e Contabilidade, Departamento de Administração, São Paulo, SP, Brazil
Fundação Escola de Comércio Álvaro Penteado, Departamento de Administração, São Paulo, SP, Brazil
Email: jboaventura@usp.br

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ABSTRACT
This study’s general objective is to investigate the moderating effect of Corporate Social Performance Disclosure (D-CSP) on the relationship between Corporate Social Performance (CSP) and Corporate Financial Performance (CFP). Based on this objective, the study presented a model in which D-CSP acts as a moderator in relation to primary stakeholders (employees, community, and suppliers). D-CSP is a mechanism through which the various social aspects involved in discretionary policies, actions, and activities identified in the management for stakeholders process can be evaluated. A sample of 1,147 companies belonging to 10 different sectors and five continents was used to test the model. Data were collected from the Bloomberg database, totaling 5,735 observations, from 2010 to 2014. The relationship was tested using the multiple linear regression model involving panel data with fixed effects, and the Newey-West robust standard errors correction. Three constructs, D-CSP, CSP, and CFP, were used to perform the tests. As a CSP measure, the CSP of the employee, supplier, and community stakeholders was used. As a D-CSP measure, the CSP disclosure scores available from the database were used, and return on assets (ROA) was used as a CFP measure. The tests carried out indicated the existence of a positive moderating effect of disclosure on the relationship between the CSP of primary stakeholders and CFP. Besides presenting a positive CSP in relation to the primary stakeholders the results enable it to be inferred that these results need to be disclosed, thus contributing to higher corporate financial performance.

Keywords: Corporate Social Performance, Corporate Financial Performance, voluntary disclosure, stakeholder theory.

Correspondence address:
Editinete André da Rocha Garcia
Universidade Federal do Ceará, Departamento de Contabilidade
Avenida da Universidade, 2486 – CEP: 60020-180
Benfica – Fortaleza – CE – Brazil

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1. INTRODUCTION

The social approach is identified as one of the accounting approaches that considers the accounting statements of social results (Iudícibus, Martins & Carvalho, 2005). In this approach, social disclosure is included as an important way of making the social actions of organizations transparent. Social disclosure serves as a company communication channel for social responsibility actions (Gonçalves, Medeiros, Niyama & Weffort, 2013). National and international companies have implemented initiatives with the aim of obtaining a content of information to be disclosed in attending to the needs of stakeholders (Oliveira, De Luca, Ponte & Pontes, 2009).

Corporate Social Performance disclosure (D-CSP) has been a topic of studies since the 1970s, following studies on Corporate Social Performance (CSP). The initial studies focused on identifying the stage of CSP disclosure, its relationship with strategy, and a description, observation, and critical evaluation of disclosure practices (Bowman & Haire, 1976; Brockhoff, 1979; Dierkes, 1979; Guthrie & Parker, 1989; Preston, 1981; Schreuder, 1979; Ullmann, 1979). The studies subsequently addressed the relationship between disclosure and different motivating factors, such as stakeholder power and pressure, culture, reputation, and corporate governance mechanisms, among others (Bayoud & Kavanagh, 2012; Mio, Venturelli & Leopizzi, 2015; Haji, 2012; Li, Luo, Wang & Wu, 2013; Van der Laan, Adhikari & Tondkar, 2005).

D-CSP is one of the ways for an organization to seek legitimacy in its actions and can be considered as an instrument for making social performance visible to stakeholders. As they are more visible, large companies use disclosure as a way of managing the perceptions of external stakeholders (Brammer & Pavelin, 2004).

In a broad approach, CSP considers the principles of social responsibility, responsiveness processes, and policies, programs, and results observed in organizations as they carry out their business (Wood, 1991). Companies geared towards Corporate Social Responsibility (CSR) will be rewarded in economic and financial terms (Carroll, 2015). Despite the arguments that indicate a positive relationship between CSP and Corporate Financial Performance (CFP) and various empirical studies that support this positive relationship (Brammer & Millington, 2008; Isaksson & Woodsie, 2016; Lu, Chau, Wang & Pan, 2014; Orlitzky, Schmidt & Rynes, 2003; Van Beurden & Gossling, 2008; Walsh, Weber & Margolis, 2003; Wang, Dou & Jia, 2015), it still lacks a full explanation; that is, it is inconclusive.

This relationship between CSP and CFP, which has not yet been fully clarified, characterizes a theoretical gap that this study proposes to investigate. It is precisely in this sense that recent studies seek to investigate this relationship more deeply and address specific factors that can moderate it (Chang, Oh & Messersmith, 2013; Hull & Rothenberg, 2008; Lee, Seo & Sharma, 2013; Peng & Yang, 2014; Tang, Hull & Rothenberg, 2012; Wang & Choi, 2013). Along these lines, this study discusses D-CSP as a factor that can intervene in the relationship between CSP and CFP, from the perspective of management for stakeholders as a result of the transparency of the social actions taken by companies. Management for stakeholders concerns value creation for stakeholders, observing the generation of positive reciprocity as a way of generating value for the company (Harrison, Bosse & Phillips, 2010).

It is understood that the effectiveness of the management of organizations should incorporate D-CSP into CSP, as a means of communication and form of accountability, thus obtaining higher financial results. Based on this argument, the question is posed: what is the influence of CSP disclosure on the relationship between the CSP of primary stakeholders and CFP?

For research purposes, primary stakeholders were considered since they relate directly with the company through direct exchanges and a relationship of reciprocity (Van der Laan, Van Ees & Van Witteloostuijn, 2008). Clarkson (1995) considers that the primary stakeholders group is directly related to the survival of the company. CSP related to primary stakeholders (employees, investors, and clients) influences a company’s financial performance. As an indication of the influence of disclosure on the relationship between the CSP of primary stakeholders and CFP, the studies have identified that employees show a commitment to companies that have a good image in terms of human capital development (Dutton, Dukerich & Harquail, 1994).

The research includes the disclosure variable as a moderating variable in the CSP-CFP relationship, which has not been considered in previous research. Thus, this study is warranted as it incorporates into a more recent line of debate. Such discussions consider that other factors can interfere in the CSP-CFP relationship, as is proposed by McWilliams and Siegel (2000). These authors identify the following as the results of studies that have considered moderating factors in this relationship: consistency in the
CSR engagement, the trajectory of CSR engagement, and the relationship between the dimensions of CSR (Tang et al., 2012); high performance labor practices (Chang et al., 2013); economic conditions (Lee, Singal & Kang, 2013); consistency of CSP and intensity of research and development (Wang & Choi, 2013).

This study contributes to the most recent discussion on the existence of contingent factors that can moderate the CSP-CFP relationship, it examines the relationship based on stakeholder theory, according to the proposition from Wood and Jones (1995), and finally, it contributes to examining the relationship based on a breakdown of CSP in which the results are individualized by type of primary stakeholder – a strategy used in previous studies (Barnett & Salomon, 2006; Choi & Wang, 2009; Perrini, Tencati & Vurro, 2012).

From a practical point of view, the results can support managers’ decisions regarding the implantation of an internal process that leads to the disclosure of their social results.

Besides the Introduction, this study presents the Theoretical Framework, Method, Results, and Conclusion. In the Theoretical Framework, theoretical arguments are presented that explain the interference of D-CSP in the relationship between CSP and CFP, based on stakeholder theory. The Method section identifies the variables used in the model, their operationalization, the characterization of the sample used in the study, and the statistical technique employed. Results presents the descriptive statistics and the results of the tests, in which the multiple linear regression model with panel data was used. Finally, the discussions and conclusions are presented.

2. THEORETICAL FRAMEWORK

2.1 Stakeholder Theory

Stakeholder theory is based on the idea that the object-function of an organization is not limited to generating profit for shareholders, but also coordinating the interests of stakeholders (Evan & Freeman, 1993). Consequently, the survival of a company and its success depend on the capacity of its managers to create sufficient wealth, value, or satisfaction to ensure that each group of primary stakeholders continues to be integral part of its system (Clarkson, 1995).

In conformity with this theory, a stakeholder is a party “that can affect or is affected by the carrying out of a company’s aims” (Freeman, 1984, p. 46). Stakeholders can be classified as primary and secondary. The primary group of stakeholders is directly related to a company’s survival (Clarkson, 1995). It is composed of shareholders, employees, clients, suppliers, and public (government and communities). For Clarkson (1995), secondary stakeholders are those that influence or are influenced by companies, but that do not carry out operations with them and are not essential for their survival. The media, activist groups, and religious organizations are examples of secondary stakeholders (Clarkson, 1995; Eesley & Lenox, 2006).

Stakeholder theory is one of the main theories used to describe CSP and explain the way it is evaluated and managed (Bingham, Smith & Adams, 2011; Clarkson, 1995; Wood, 1991). This is explained with the support of the normative aspect of the theory, since CSP addresses morals, ethics, and ethical obligations (Phillips, Freeman & Wicks, 2003). Clarkson (1995) proposes that CSP can be analyzed and evaluated more effectively using a framework based on the management of a company’s relationships with its stakeholders.

Stakeholder theory presents a logical explanation of the whys of CSP (Backhaus, Stone & Heiner, 2002). Wood and Jones (1995) consider that stakeholders assume at least three roles in relation to CSP: (i) they are sources of performance expectations; (ii) they are the target of company behavior, since they are the beneficiaries of actions; and (iii) they evaluate how well companies meet expectations and/or how a company’s behavior directly affects them or has an influence on their environment. The theory is used to explain the relationship between management for stakeholders and CSP, and also between management for stakeholders and CFP (Laplume, Sonpar & Litz, 2008).

Studies in the area of CSP relate to stakeholder theory in various ways, such as: the relationship between CSP and the attractiveness of employees (Backhaus et al., 2002); differences in the CSP activities of family businesses and non-family businesses, an analysis made considering the descriptive point of view (Bingham et al., 2011); the influence of the stakeholder over the extent of CSP (Brower & Mahajan, 2013); the relationship between pressure from stakeholders and disclosure (Font, Walmsley,
Cogotti, McCombes & Haeusler, 2012); and stakeholder management and social questions (Hillman & Keim, 2001). Harrison et al. (2010) use the term management for stakeholders instead of stakeholder management.

For the purposes of this research, stakeholder theory is the theoretical basis that indicates an understandable reason for companies to redirect their management for stakeholders activities, with a view to providing positive results for the organization and guaranteeing its continuity. Supported by the transparency of this management, materialized through D-CSP, companies have the potential chance to capture value and, consequently, present higher CFP.

2.2 Relationship between CSP and CFP

Since the 1980s, studies on CSP have been related to company ethics, corporate citizenship, sustainability, and management for stakeholders (Carroll, 2015).

In the broad sense, CSP is “a configuration of the businesses of an organization based on the principles of social responsibility, responsiveness processes, and policies, programs, and observable results related to a company’s social actions” (Wood, 1991, p. 693).

From the perspective presented in this study, CSP represents the different social aspects involved in the discretionary policies, actions, and activities identified in the management for stakeholders.

The establishment of better relationships with the primary stakeholders, such as employees, clients, suppliers, and community, leads to the growth of shareholder wealth, helping companies to develop valuable intangible goods that can be sources of competitive advantage (Hillman & Keim, 2001). Thus, based on this argument, greater CSP leads to greater CFP.

The relationship between CSP and CFP has been the object of various studies for around 40 years. These indicate four models: a positive linear relationship between CSP and CFP; a negative linear relationship between CSP and CFP; positive non-linear relationships between CSP and financial performance; and negative non-linear relationships between CSP and CFP (Brammer & Millington, 2008).

The meta analysis developed and presented by Orlitzky et al. (2003) showed that: CSP and CFP are generally positively related in various contexts and industrial sectors; there is bidirectional causality between CSP and CFP; the results between CSP and CFP are stronger after the removal of environmental measures; and the results between CSP and CFP are more impacted when the studies correlate external measures of CSP (reputation or disclosures) and CFP (such as share returns or growth of sales), confirming the hypothesis that CSP helps to form a positive reputation and goodwill with external stakeholders.

The positive relationship between CSP and CFP is indicated in studies that use stakeholder theory as a theoretical approach (Baird, Geylani & Roberts, 2012; Wang et al., 2015). In these studies, the CSP from a previous period is associated with the CFP of the current period (Barnett & Salomon, 2012; Callan & Thomas, 2009; Choi, Kwak & Choe, 2010; Waddock & Graves, 1997; Wang et al., 2015). This causal relationship is coherent with what is proposed by good management theory (Waddock & Graves, 1997). According to this theory, companies that invest in RSC enjoy higher CFP as a result (Boaventura-da Silva & Bandeira-de-Mello, 2012).

The positive relationship between CSP and CFP is supported by stakeholder theory from an instrumental perspective (Wang et al., 2015). This approach is explained based on the connection of the effects of the management for stakeholders and the results achieved by organizations (Donaldson & Preston, 1995). A positive influence was shown in the study developed by Berman, Wicks, Kotha & Jones (1999). The authors verified that the position of companies with regards to their primary stakeholders directly affects financial performance, reinforcing the perspective of stakeholder theorists, who emphasize employee and client management as factors that influence financial performance.

Various studies indicate that management for stakeholders leads to company differentiation, attractiveness, it draws investments, and produces intangible resources, helping the company to acquire a competitive advantage, among other things (Wang et al., 2015).

From the perspective that indicates positive results of management for stakeholders, different positive results are identified, including: employee commitment to a company that presents a good image in terms of human capital development (Dutton et al., 1994) and the attraction of job candidates (Backhaus et al., 2002; Greening & Turban, 2000); growth in shareholder wealth and the generation of a competitive advantage (Hillman & Keim, 2001); the clients may respond to CSP, increasing the demand for products or services or even increasing the value attributed to products or services (Bhattacharya & Sen, 2003).

In fact, by reinforcing their relationships with those considered as primary stakeholders (employees, clients, suppliers, and community) companies can obtain positive financial results. Consequently, those that aim for better social performance also tend to enjoy better financial results (Baird et al., 2012).
Considering that by managing primary stakeholders companies will achieve their objectives, influencing the continuity of their businesses, it is suggested that:

**H₁**: CSP related to primary stakeholders positively influences CFP.

### 2.3 Influence of D-CSP on the Relationship between CSP and CFP

The different studies that have examined the relationship between CSP and CFP over the last decades have not indicated a conclusive relationship (Lu et al., 2014). This debate has not yet been resolved, partly because what may have appeared to be a direct relationship has proven to be complex (Hull & Rothenberg, 2008). The studies indicate that the relationship between CSP and CFP can vary as a result of various factors that potentially moderate or contextualize the relationship (Chang et al., 2013).

In light of this complexity, in recent years the authors have come to examine the relationship considering some contingent factors. Empirically, such factors have been included in the relationship in the form of moderators. Hull and Rothenberg (2008) verified that the innovation and level of differentiation in the industry negatively moderate the relationship between CSP and CFP. Tang et al. (2012) verified that consistency in the engagement, engagement trajectory, and relationships between the SCR dimensions positively moderate the relationship between CSP and CFP. Chang et al. (2013) identified that high performance labor practices positively moderate the relationship between CSP and CFP. Lee et al. (2013) verified that the economic conditions positively moderate the CSP-CFP relationship in economically unfavorable periods. Wang and Choi (2013) presented a result that identifies that CSP consistency and intensity of research and development positively moderate the CSP-CFP relationship. Finally, more recently, Peng and Yang (2014) identified that a high degree of shareholder concentration is a variable that negatively moderates the relationship between CSP and CFP. In this line of investigation, this study aims to verify whether disclosure is one of these factors that can influence the relationship between CSP and CFP.

Disclosure is timelily making relevant information available that results in a transparent image of corporate operations, CFP, and corporate governance (Dawkins & Fraas, 2008). It can be considered the result of the transparency of organizations with relation to their different stakeholders, and an operationalization of the disclosure of useful information for these users’ decision-making process. This usefulness of disclosure for stakeholders is also highlighted by Dawkins and Fraas (2008). Disclosure also forms part of communication as a company strategy for maintaining legitimacy (Suchman, 1995).

For the purposes of testing the relationship between CSP and CFP moderated by D-CSP, from the perspective of stakeholder theory, D-CSP is the voluntary presentation of useful information to the various stakeholders resulting from the transparency of an entity’s CSP.

Voluntary disclosure can be considered as a support strategy linked to CSP and/or an alternative strategy for management for stakeholders (Ullmann, 1985). In fact, as CSP constitutes a measure that evaluates the performance of an organization in attending to the interests of its stakeholders (Boaventura et al., 2012), disclosure is a means by which stakeholders can evaluate CSP (Dawkins & Fraas, 2008), forming part of the dialogue between a company and its stakeholders (Roberts, 1992). In general, D-CSP can send a positive signal to stakeholders and, consequently, relevance is attributed to the value of the information disclosed by a company. In light of this, it is suggested that:

**H₂**: D-CSP positively moderates the relationship between CSP related to the primary stakeholders and CFP.

Based on the hypotheses of the study, the relationship proposed between the CSP, D-CSP, and CFP constructs can be demonstrated using the model presented in Figure 1.
The model is based on what is proposed by Baron and Kenny (1986) when they present the physical-operational structure of the moderation model.

3. METHOD

This research is classified as descriptive and explanatory, in accordance with the typology taught by Vergara (1998). To test the assumed hypotheses, the quantitative method was used.

In order to carry out the statistical tests, secondary data collected from the Bloomberg database were used. Data from this database have been used in various previous studies and cover environmental, social, corporate governance, and D-CSP indicators, as well as financial data (Chiu & Sharfman, 2011; Fernandez-Feijoo, Romero & Ruiz, 2014; Gitman, Chorn & Fargo, 2009; Halbritter & Dörfler, 2015; Surroca & Tribó, 2008).

The 1,147 companies that compose the sample were chosen from all those that present data in the Bloomberg database, considering those that presented data for all the object variables of the research in order to avoid the absence of data. The companies chosen belong to different countries from Asia Pacific (60.68%), Europe (24.41%), North America (9.76%), Latin America (2.26%), and Africa (2.53%). The percentage of companies from Asia Pacific is impacted by the predominance of Chinese and Japanese companies. The Chinese companies use CSP due to the need to gain legitimacy and remain competitive in the global market (Lau, Lu & Liang, 2016; Wang, Tong, Takeuchi & George, 2016). In addition to these factors, China is one of the countries with the most D-CSP regulations (Wang et al., 2016). The Japanese companies have given importance to CSR, with the adoption of various measures related to CSR policies, such as the introduction into their corporate structures of specific departments for addressing this policy and the inclusion of statements related to it into their missions (Kato & Kodama, 2017).

The companies are identified in the database as belonging to the following sectors: Essential and Non-essential Consumer Goods, Energy, Industry, Materials, Utilities, Financial, Health, Information Technology, and Telecommunications. For the purposes of this study, these companies were grouped into Consumer Goods (23.54%), Industry (45.95%), and Services (30.51%), thus reducing the quantity of dummies.

The data are from 2010 to 2014, totaling 5,735 observations. Of this total, 112 observations were excluded referring to companies that indicated total community expenses equal to 0. This came about through the transformation of this variable, with the use of a base-10 logarithm, thus leading to this quantity of missing values.

Based on the criteria of the Blocked Adaptive Computationally Efficient Outlier Nominator (BACON) algorithm, proposed by Billor, Hadi, and Velleman (2000), and using the command developed to identify outliers for multivariate data (Weber 2010), 112 observations were identified, in the 0.25 percentile, characterized as outliers. To carry out the test, the variables that presented a coefficient of variation greater than 0.3 (return on assets [ROA], Disc, and Risk) were considered based on the indication that the dataset could be considered heterogeneous (Fávero, Belfiore, Silva & Chan, 2009). However, the decision was made not to discard these observations based on the theoretical reason of the
normality hypothesis described by the central limit theorem (Gujarati & Porter, 2011).

To verify the moderating effect of disclosure in the relationship between CSP and CFP, ROA was used as a proxy for the CFP construct. This measure was identified as one of the most widely used in studies that have tested the CSP-CFP relationship (Boaventura et al., 2012).

As a proxy for CSP, the variables related to the CSP of employees, community, and suppliers available from the database were used. As a measure of disclosure, the score for this variable available from the database was used. These variables are described in Table 1, elaborated according to information featured in the database.

Table 1
Description of the independent variables

<table>
<thead>
<tr>
<th>Construct</th>
<th>Variable</th>
<th>Dimension</th>
<th>Nature of the Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CSP employees</td>
<td></td>
<td>Binary</td>
<td>Indicates whether the company is, by policy, committed to equal opportunities.</td>
</tr>
<tr>
<td></td>
<td>Equal opportunities</td>
<td></td>
<td>0 = No, 1 = Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Protection of workers' rights</td>
<td></td>
<td>0 = No, 1 = Yes</td>
<td>Indicates whether the company has implemented initiatives to ensure the protection of rights of all the people it works with.</td>
</tr>
<tr>
<td></td>
<td>Fair pay</td>
<td></td>
<td>Binary</td>
<td>Indicates whether the company is committed to ensuring a fair minimum wage for all collaborators in the group.</td>
</tr>
<tr>
<td></td>
<td>Health and safety management</td>
<td></td>
<td>0 = No, 1 = Yes</td>
<td>Indicates whether the company has recognized its health and safety risks and responsibilities and is making an effort to improve its management of them.</td>
</tr>
<tr>
<td></td>
<td>Employees trained in CSR</td>
<td></td>
<td>0 = No, 1 = Yes</td>
<td>Indicates whether the company carries out training courses related to CSR for its employees.</td>
</tr>
<tr>
<td></td>
<td>CSP supplier</td>
<td>Suppliers</td>
<td>Binary</td>
<td>Indicates whether the company has implemented socioenvironmental initiatives in its supply chain.</td>
</tr>
<tr>
<td></td>
<td>Disclosure</td>
<td>Community</td>
<td>Total spending divided by the number of company employees</td>
<td>Total spending on activities developed for the community.</td>
</tr>
<tr>
<td></td>
<td>Disclosure</td>
<td></td>
<td>0.1-100.0: 0.1 for the companies that disclose a minimum amount of data and 100.0 for those that disclose all the data.</td>
<td>Score based on the extent of the company’s social, environmental, and governance disclosure. It is obtained by weighting in terms of importance. Data related to employees have a greater weight than other disclosures. It also considers the relevance of the disclosure for that sector in the industry.</td>
</tr>
</tbody>
</table>

CSP = Corporate Social Performance; CSR = Corporate Social Responsibility.
Source: Elaborated by the authors.

The moderation hypothesis is supported if the regression coefficient of the interactive variable (disclosure multiplied by CSP) is significantly different from 0 (Aguinis, 1995; Baron & Kenny, 1986).

As control variables, size and risk were used as measures that affect the CSP-CFP relationship (for example, Andersen & Dejoy, 2011; Callan & Thomas, 2009; Hull & Rothenberg, 2008; Makni, Francoeur & Bellavance, 2009; Margolis, Elfenbein & Walsh, 2009).

Based on the hypotheses of the study, two models will be presented: the first presents the results that enable the hypothesis of the influence of CSP related to primary stakeholders on CFP to be tested (model 1), and the second enables inferences regarding the moderation of D-CSP in the relationship between CSP related to primary stakeholders and CFP (model 2).
The direct relationship between CFP and CSP is defined by the following equation:

\[ CFP_{it} = \alpha_i + \beta_1 CSP_{emplit} + \beta_2 CSP_{suppit} + \beta_3 CSP_{commit} + \beta_4 size_{it} + \beta_5 risk_{it} + \varepsilon_{it} \]

Considering the dependent, independent, and control variables and the interaction itself defined for a moderation model, the final model for analysis is:

\[ CFP_{it} = \alpha_i + \beta_1 CSP_{emplit} + \beta_2 CSP_{suppit} + \beta_3 CSP_{commit} + \beta_4 disc_{it} + \beta_5 DiscxCSPl_{emplit} \\
+ \beta_6 DiscxCSPl_{suppit} + \beta_7 DiscxCSPl_{commit} + \beta_8 size_{it} + \beta_9 risk_{it} + \varepsilon_{it} \]

in which \( CFP \) is the ROA of company \( i \) in year \( t \), \( CSP_{empl} \) is the CSP related to the employee stakeholder of company \( i \) in year \( t \), \( CSP_{supp} \) is the CSP related to the supplier stakeholder of company \( i \) in year \( t \), \( CSP_{comm} \) is the CSP related to the community stakeholder of company \( i \) in year \( t \) (resulting from the calculation of the base-10 logarithm of the total spending related to these stakeholders divided by the number of employees), \( disc \) is the disclosure of company \( i \) in year \( t \), \( DiscxCSPl_{empl} \) is the interaction of the employee CSP and disclosure variables of company \( i \) in year \( t \), \( CSP_{supp}xdisc \) is the interaction of the supplier CSP and disclosure variables of company \( i \) in year \( t \), \( CSP_{commit}xdisc \) is the interaction of the community CSP and disclosure variables of company \( i \) in year \( t \), \( size \) is the base-10 logarithm of the quantity of employees of company \( i \) in year \( t \), and risk is calculated by dividing the total debt by the total assets of company \( i \) in year \( t \).

After identifying the variables of the models, the regression model with panel data was applied, using Stata version 13 to estimate the equations, covering various companies (cross section) in the period from 2010 to 2014. To identify the panel data model to be applied to generate the estimation, the Lagrange multiplier (LM), Breusch-Pagan (indicates the POLS or random effect model), Chow F (indicates the POLS or fixed effect model), and Hausman (indicates random or fixed effect) tests were carried out.

In order to remove the problem of multicollinearity between the independent, moderating, and interactive variables and the dependent variable, the independent and interactive variables were standardized, centering on the mean, as proposed by Echambadi and Hess (2007).

4. RESULTS

4.1 Descriptive Statistics

In absolute numbers, individually, the companies have from 2 to 2.2 million employees. The CSP_{empl} variable can vary from 0 to 5 in accordance with the fulfillment of various dimensions related to the employee CSP presented in Table 1. Table 2 presents the quantity of observations with each one of the six sectors.

<table>
<thead>
<tr>
<th>Sum of the scores</th>
<th>Observations n (%)</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>410 (7.15)</td>
<td>7.15</td>
</tr>
<tr>
<td>1</td>
<td>621 (10.83)</td>
<td>17.98</td>
</tr>
<tr>
<td>2</td>
<td>1,701 (29.66)</td>
<td>47.64</td>
</tr>
<tr>
<td>3</td>
<td>2,620 (45.68)</td>
<td>93.32</td>
</tr>
<tr>
<td>4</td>
<td>348 (6.07)</td>
<td>99.39</td>
</tr>
<tr>
<td>5</td>
<td>35 (0.61)</td>
<td>100.00</td>
</tr>
<tr>
<td>Total</td>
<td>5,735 (100.00)</td>
<td></td>
</tr>
</tbody>
</table>

Source: Elaborated by the authors.
From the results presented, 45.68% of the companies present a score equivalent to fulfilling three of the five dimensions related to employee CSP. It is also verified that 99.39% of the companies present a score of up to four points.

In relation to the participation of the companies in the initiatives related to suppliers, Table 3 presents the frequency in which the companies implement such initiatives in their supply chain. Based on these data, it is verified that this policy is implemented by more than 53.15% of the companies.

<table>
<thead>
<tr>
<th>Table 3</th>
<th>Socioenvironmental initiatives in the supply chain (CSPsupp)</th>
</tr>
</thead>
<tbody>
<tr>
<td>n (%)</td>
<td>Accumulated</td>
</tr>
<tr>
<td>---------</td>
<td>-------------------------------------------------------------</td>
</tr>
<tr>
<td>The company has not implemented social initiatives in its supply chain.</td>
<td>2,687 (46.85)</td>
</tr>
<tr>
<td>The company has implemented social initiatives in its supply chain.</td>
<td>3,048 (53.15)</td>
</tr>
<tr>
<td>Total</td>
<td>5,735 (100.00)</td>
</tr>
</tbody>
</table>

**Source:** Elaborated by the authors.

Table 4 identifies the mean and the standard deviation of the sample and the coefficient of variation of the ROA, CSPcomm, Disc, Size, and Risk variables. Based on the dataset, if the value of the coefficient of variation is greater than 0.3, the dataset can be considered heterogeneous (Fávero et al., 2009). Based on this principle, the data related to CSPcomm, Disc, and Size can be considered homogeneous.

<table>
<thead>
<tr>
<th>Table 4</th>
<th>Tendency measures and dispersion of the variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistic</td>
<td>ROA</td>
</tr>
<tr>
<td>Mean</td>
<td>0.05185</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.06475</td>
</tr>
<tr>
<td>Coefficient of Variation</td>
<td>1.249</td>
</tr>
</tbody>
</table>

**Source:** Elaborated by the authors.

The correlation matrix contained in Table 5 expresses, in general, a low correlation between the variables at a 5% level of significance. A moderate positive correlation is verified between the CSPempl and disclosure and CSPsupp and disclosure variables, and also between CSPcomm and Size. For the purposes of the research, this result may be an indication that no multicollinearity problem exists. This occurs when there are very high correlations between explanatory variables (Fávero, 2015).

<table>
<thead>
<tr>
<th>Table 5</th>
<th>Correlation matrix between the variables used in the research</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ROA</td>
</tr>
<tr>
<td>ROA</td>
<td>1</td>
</tr>
<tr>
<td>CSPempl</td>
<td>-0.0282*</td>
</tr>
<tr>
<td>CSPsupp</td>
<td>-0.1148*</td>
</tr>
<tr>
<td>CSPcomm</td>
<td>0.0706*</td>
</tr>
<tr>
<td>Disc</td>
<td>-0.0759*</td>
</tr>
<tr>
<td>Disc x CSPempl</td>
<td>0.0356*</td>
</tr>
<tr>
<td>Disc x CSPsupp</td>
<td>0.0599*</td>
</tr>
</tbody>
</table>
4.2 Presentation of the Results

When verifying the modeling to be applied, the Breusch-Pagan LM, Chow F, and Hausman tests resulted in the indication of the fixed effects model as the most recommended to indicate the coefficients of the variables proposed in the model and the respective degree of significance of the influence.

The homogeneity of the residuals of the panel data regression with fixed effects was verified based on the Wald test, in order to detect the presence of heteroskedasticity. The tests to verify serial autocorrelation and homogeneity of the residuals rejected the hypothesis, thus identifying the heteroskedasticity and autocorrelation of the residuals, which configures a break from the assumptions of the regression model for panel data. To solve these problems, the Newey-West robust standard errors correction was used. Based on these results, the statistic of the models was then generated using the commands in the Stata software applied to models with fixed effects, implemented with the support of the correction model developed by Newey and West (1987).

After generating the model, the Tolerance and Variance Inflation Factor (VIF) statistics were applied. The result of the test indicated a VIF of below 10, which removes the problem of multicollinearity (Hair, Black, Babin, Anderson & Tatham, 2009).

After carrying out the tests to identify the assumptions of the model and with the use of the necessary adjustments the results presented in Table 6 were obtained. The estimates generated by the Stata software with the Newey-West robust standard errors correction do not calculate the R² estimates. To substitute this estimate the sum of the square of the residuals (SQR) was generated. The expected result is that these residuals around the line of regression will be as low as possible (Gujarati & Porter, 2011).

Table 6
Results of the regression with panel data

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ROA</td>
<td>ROA</td>
</tr>
<tr>
<td>CSPempl (β₁)</td>
<td>0.0538</td>
<td>0.356***</td>
</tr>
<tr>
<td></td>
<td>(0.47)</td>
<td>(3.05)</td>
</tr>
<tr>
<td>CSPsupp (β₂)</td>
<td>-1.754****</td>
<td>-1.272****</td>
</tr>
<tr>
<td></td>
<td>(-7.94)</td>
<td>(-4.63)</td>
</tr>
<tr>
<td>CSPcomm (β₃)</td>
<td>0.947****</td>
<td>1.042****</td>
</tr>
<tr>
<td></td>
<td>(9.91)</td>
<td>(10.38)</td>
</tr>
<tr>
<td>disc (β₄)</td>
<td>-0.0401***</td>
<td>(-3.57)</td>
</tr>
<tr>
<td></td>
<td>(-3.57)</td>
<td></td>
</tr>
<tr>
<td>DiscxCSPempl (β₅)</td>
<td>0.0149*</td>
<td>0.0149*</td>
</tr>
<tr>
<td></td>
<td>(1.67)</td>
<td>(1.67)</td>
</tr>
<tr>
<td>DiscxCSPsupp (β₆)</td>
<td>0.0631***</td>
<td>0.0631***</td>
</tr>
<tr>
<td></td>
<td>(2.78)</td>
<td>(2.78)</td>
</tr>
<tr>
<td>DiscxCSPcomm (β₇)</td>
<td>-0.00952</td>
<td>-0.00952</td>
</tr>
<tr>
<td></td>
<td>(-1.29)</td>
<td>(-1.29)</td>
</tr>
<tr>
<td>Risk (βₑ)</td>
<td>-0.116****</td>
<td>-0.117****</td>
</tr>
<tr>
<td></td>
<td>(-18.82)</td>
<td>(-18.99)</td>
</tr>
</tbody>
</table>

* = 5% level of significance.

CSPcomm = corporate social performance related to the community stakeholder; CSPsupp = corporate social performance related to the supplier stakeholder; CSPempl = corporate social performance related to the employee stakeholder; Disc = social disclosure score; ROA = return on assets.

Source: Elaborated by the authors.
Model 1, indicated in Table 6, tests H₁ related to the influence of the CSP of the primary stakeholders construct on CFP.

The outputs of model 1 show, based on the p-values of the F and t statistics, that the parameters of the explanatory variables CSPsupp (β₂ = -1.754; p < 0.001) and CSPcomm (β₃ = 0.947; p < 0.001) are statistically significant for explaining the behavior of financial performance. Based on the t statistic, the CSPempr variable (β₁ = 0.0538; p = 0.641) does not present statistical significance in the presence of the other variables.

The coefficients indicate that the variation of one unit of CSPcomm (β₃ = 0.947; p < 0.001) results each year in an increase in CFP, ceteris paribus. These results indicate that H₁ was partially supported.

Model 2 tests the moderating effect of CSP disclosure on the relationship between the CSP of the primary stakeholders and CFP.

Based on the p-values of the F and t statistics of model 2, identified in Table 6, it is verified that the parameters of the explanatory variables derived from the DiscxCSPempl (β₅ = 0.0149; p < 0.10) and DiscxCSPsupp (β₆ = 0.0631; p < 0.01) interaction are statistically significant for explaining the behavior of financial performance in the presence of the other variables in the model. Based on the t statistic, the DiscxCSPcomm variable (β₇ = -0.00952; p = 0.199) does not present statistical significance in the presence of the other variables.

The coefficients of model 2 indicate that each unit of the interaction of the Disc variable with the employee and supplier CSP results each year in an increase in CSP, ceteris paribus. These results indicate that H₂ is partially supported.

4.3 Discussion of the Results

The central point of this study is to identify the effect of disclosure on the relationship between CSP and CFP and present the discussion about how this interaction occurs at the level of the relationships with primary stakeholders, influencing CSP. It is argued that D-CSP has a positive moderating effect on the CSP-CFP relationship over time.

With relation to the effect of the employee stakeholder CSP on CFP (model 1), based on the results expressed in Table 6, the relationship did not indicate statistical significance. The theories and the research on the relationship between human resource management and the results involve different key components that intertwine to create the effect on CFP (Jiang, Lepak, Hu & Baer, 2012).

The CSP construct related to the employee stakeholder indicated in this study captures various important dimensions, such as equal opportunities, protection of workers’ rights, health and safety management, and...
training employees in CSR. These practices may not lead to CFP, despite the drivers of operational performance. In certain contextual circumstances, CSP may not enable companies to directly materialize their involvement in social questions related to their stakeholders into CFP, since there are other contingencies in the CSP-CFP relationship (Hasan, Kobeissi, Liu & Wang, 2016). The authors consider that knowledge of this contingent nature of CSP is crucial in the competitive context. In light of the above, it can be inferred that the practices consistent with CSP related to employee stakeholders presented in the research were insufficient to capture their influence on CSP. The result indicated in model 1 leads to the assumption that despite the proxy capturing various components of employee CSP, there are other intervening factors in the relationship between CSP and CFP.

The results of the test that verified the moderating effect of CSP disclosure on the relationship between CSP and CFP (model 2) revealed that, besides expressing CSP in relation to the employee stakeholder, it is necessary to externalize this result, using disclosure to achieve a higher CFP. The positive effect of the interaction of CSP disclosure with employee CSP on CSP may be associated with the existence of external pressures influencing the strengthening of the relationships between companies and their employees (Griffin, Bryant & Koerber, 2015).

D-CSP results from management for stakeholders (Boesso & Kumar, 2007) and influences a company’s reputation by gaining the trust of stakeholders (Bayoud & Kavanagh, 2012), since the usefulness and legitimacy of organizational activities mostly occur based on information obtained in the corporate communication actions of the organization (Mendonça, Ricardo & Amantino-de-Andrade, 2003). Managers are incentivized to disclose information on their various programs related to particular stakeholders with attributes of power, legitimacy, and urgency, just as the salience model from Mitchell, Agle, and Wood (1997) proposes, in order to indicate that they are in conformance with their expectations. In addition, it can be inferred that investment in social responsibility activities and disclosure have important consequences in the creation and development of fundamental intangible resources, especially those associated with employees (Branco & Rodrigues, 2006).

Another explanation for this positive relationship is obtained in research that suggests that companies with strong CSP are perceived as more attractive employers (Jones, Willness & Madey, 2014). The result of the research of these authors reveals that CSP disclosure leads to human resource attractiveness, which can contribute to an improvement in productivity and consequently influence CSP.

The effects of the interaction between CSP disclosure and employee CSP on attracting human resources can influence the existence of intangibles capable of generating a competitive advantage, with an increase in the company’s credibility level. Stakeholders can perceive those companies that present performance in their management for these stakeholders, beyond merely fulfilling labor rules, thus leading to visible levels of CSP.

The second effect of the tested relationships is supplier CSP and its interaction with CSP disclosure on CSP (models 1 and 2).

The result associated with the CSP coefficient related to the supplier stakeholder presents a marginal negative effect on the relationship with CFP (model 1). This result confirms the finding of the research from Craig (2005), who did not verify a direct relationship between social responsibility in the supply chain and a reduction in company costs. The author understands that generating direct results in costs involves learning how to transform this activity into results for the company. Managers can be oblivious to the effects of CSP on the supply chain and consequently on costs, suggesting that many of them are committing to this activity because “it would be the right thing to do” (Craig, 2005).

Another assumption that is made concerns the direct impact on the costs of the supply chain. Managers are in a particularly advantageous position to positively influence CSP by means of various actions related to the supply chain (Carter & Easton, 2011). The practices resulting from the implementation of socioenvironmental policies in a company’s supply chain, however, can impose additional costs on suppliers if they were not strategically aligned with these policies. Since for suppliers the company can be seen as a salient stakeholder, in accordance with the salience model presented by Mitchell et al. (1997), they will be subjected to these costs, passing them on into the price of their product. In light of this, this effect will directly influence the organization’s result.

Another assumption is that this relationship between supplier CSP and CFP can be influenced by other factors, among which disclosure is one, as proposed by the research. It was verified that disclosure moderates the relationship between CSP and CFP in light of the result of the interaction between the disclosure variable and CSP. This result may be a sign that despite companies not obtaining a direct effect, in the result of their actions related to the implementation of socioenvironmental policies in their supply chain, disclosure becomes an important factor for recovering the “costs” of these actions, confirming one of the assumptions of Wang and Sarkis (2013).
The third effect of the tested relationships is the community CSP and its interaction with disclosure (models 1 and 2). The results of the relationship presented in model 1 identify the positive financial rewards obtained with the promotion of positive relationships with the communities that relate with the organization (Barnett & Salomon, 2006).

Despite this positive influence of community CSP on CSP (models 1 and 2) no statistically significant effect of the moderation of community CSP disclosure on the relationship is verified, as presented in Table 6 (model 2). While the interaction between disclosure and practices related to employees and suppliers indicates that the hypothesis that D-CSP positively moderates the relationship between the CSP related to the primary stakeholder and CFP.

The main aim of the research was to identify the moderating effect of D-CSP on the relationship between the CSP of primary stakeholders and CFP.

The first relationship tested verifies the direct effect of the CSP of primary stakeholders on CSP. The results show that the investments carried out by a company in social actions involving employee and supplier stakeholders were not directly revealed in financial return. As Harrison et al. (2010) remind us, investing in stakeholders is not a managerial cure-all nor a rule for generating wealth, but rather constitutes a difficult task with an uncertain result.

Another relationship verified aimed to answer the research question and verify whether disclosure has a moderating effect on the relationship between CSP and CFP. This effect was verified in the CSP related to the employee and supplier stakeholders. The result contradicts those that indicate that investing in CSP does not lead to higher CFP, since it indicates that the relationship can be influenced by other factors, as indicated in other studies (Chang et al., 2013; Guthrie & Parker, 1989; Hull & Rothenberg, 2008; Tang et al., 2012; Wang & Choi, 2013).

Concerning the results for the community stakeholder, these show that the relationship between the community stakeholder CSP and CSP is direct. However, it is observed that with disclosure, there is a positive variation in the coefficient associated with this variable, indicating that even though the interaction does not capture CFP, disclosure has a positive effect, indicated in the increase in the coefficient related to the CSPcomm variable.

In light of the above and based on the results of this research, it is verified that disclosure has a moderating effect on the relationship between CSP and CFP, notably when the CSP related to employees and its interaction with disclosure is analyzed. From the result presented, the moderation of disclosure in relation to the variable involving supplier CSP is also verified. This result confirms the hypothesis that D-CSP positively moderates the relationship between the CSP related to the primary stakeholder and CFP.

This study has collaborated in identifying the contribution of disclosure in the CSP of companies, since this disclosure leads to additional costs. Thus, the result of the study serves as a basis for decisions regarding disclosure. It was observed that by being transparent in their actions with stakeholders, companies can capture higher CFP. The second contribution is the examination of the relationship based on stakeholder theory, which is important for studying the CSP-CFP relationship (Wood & Jones, 1995).

In managerial terms, this investigation helps in manager decisions related to CSP disclosure. A manager may consider that in some situations attending to stakeholders well in isolation is not sufficient for generating a satisfactory organizational return. Depending on the stakeholder, he/she not only needs to provide direct results, but also disclose the CSP of that stakeholder. This can be considered as a way of giving transparency to his/her management for these stakeholders and for other important ones, such as employee and supplier stakeholders, which are more associated with more internal company actions.

The main limitations of this research are: (i) a lack of data related to the client primary stakeholder and (ii) heterogeneity of the sample, which is composed of companies of various sizes in terms of number of employees, varying from 2 to 2.2 million.

Based on the results of this study and others that indicate the existence of various factors in the relationship between CSP and CFP, it is proposed that different moderating variables should be included in order to contribute to a contingent approach to the relationship.
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The influence of social disclosure on the relationship between Corporate Financial Performance and Corporate Social Performance


