MODERATING EFFECT OF CORPORATE SOCIAL RESPONSIBILITY ON THE RELATIONSHIP BETWEEN COMPETITIVE STRATEGIES AND THE COMPETITIVENESS OF BRAZILIAN AND FRENCH INDUSTRIAL COMPANIES

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ABSTRACT

Corporate Social Responsibility has been presented as an important organizational instrument, used by management not only as a social and environmental contribution, but also as a vital instrument for competitiveness and business continuity, contributing to several parameters. Therefore, this study aims to analyze the moderating effect of Corporate Social Responsibility (CSR) on the relationship between competitive strategies and the competitiveness of Brazilian and French industrial companies. Techniques such as descriptive statistics, difference tests between means, and multiple linear regression were used to treat data from 2016 to 2020. The results indicated statistically significant differences between Brazilian and French companies in relation to their competitive strategies (intangibility, internationalization, and CSR) and their competitiveness. In line with the assumptions of Institutional Theory, the results revealed that the interaction between CSR and competitive strategies increased French industrial companies’ competitiveness. Simultaneously, the same was not found for Brazilian companies. The research contributes by analyzing CSR as a contingency factor in the relationship between competitive strategies and competitiveness in light of institutional theory, thus considering that the institutional environment of each country can influence the behavior of companies regarding CSR practices. Furthermore, managerially, the study highlights the effects of CSR in transforming companies’ competitive strategies.

Keywords: Competitive strategies. Competitiveness. CSR.
1 INTRODUCTION

Amid the challenge of increasing the competitiveness of companies, the new, processes, means, courses of action, and initiatives linked to their resources and business environment are considered strategies. Such competitive strategies enable further development in terms of the capacity and efficiency to create, expand, and apply resources (Brown & Kimbrough, 2011; Albuquerque Filho et al., 2020).

Competitiveness is a collection of combined skills and action models affected by sectoral patterns and sociocultural characteristics (Agnihotri & Bhattacharya, 2019; Pettigrew & Whipp, 1993a). This component is linked to the company’s ability to understand and manage its resources through adaptation to the norms and standards of conduct socially accepted and valued by its players in their context of action (Machado-da-Silva & Barbosa, 2002).

One of the possible approaches to investigate the phenomenon of business competitiveness is Institutional Theory (IT), according to which organizations are influenced by normative pressures, sometimes arising from external factors (e.g., country), other times arising from internal sources (Zucker, 1987). This association of competitiveness with institutional theory occurs, above all, by assuming that companies present satisfactory results from adopting valued and accepted practices in their operating environment, not only from aspects related to purely economic interests (Dimaggio & Powell, 1983).

Competitiveness assumes that a company’s strategy combines internal competencies with external opportunities to provide a source of sustainable competitive advantage through which it can achieve certain objectives (Marin et al., 2012). However, for any competitive advantage to be sustainable, the strategy must be acceptable in the environment in which the company competes (Werther Jr & Chandler, 2011). In this perspective, companies have also dedicated themselves to the institutional environment, which comprises the contextual dimension related to the organizational need to obtain legitimacy from the perspective of stakeholders (Meyer & Rowan, 1977; Machado-da-Silva & Barbosa, 2002; Peeters et al., 2014), dedicating resources to social initiatives, from raising awareness of the community where they operate to environmental protection and socially responsible business practices (Du et al., 2010). From there, companies identify the possibility of obtaining competitive advantages through investments in corporate social responsibility (Menguc & Ozanne, 2005).

Aguinis (2011) points to CSR as a set of actions and policies considering stakeholder expectations. This definition strengthens the idea that organizations need to develop skills and capacities associated with the “green” environment (e.g., CSR) to remain competitive (Menguc & Ozanne, 2005). Knorringa and Nadvi (2016) complement that, besides environmental aspects, CSR also consists of a process that encompasses economic and social interests by companies that also aim to recognize the multiple interests of stakeholders. Thus, IT can explain that CSR can interfere with business strategies, impacting the company’s competitiveness (Freire & Albuquerque Filho, 2022; Santos & Porto, 2013).

When analyzing CSR as a contingency factor in the relationship between competitive strategies and competitiveness under the institutional theory framework, it considers that the institutional environment of each country influences the behavior of companies (Freire & Albuquerque Filho, 2022). Companies will be more likely to act in a socially responsible manner if there are strong and well-applied regulations to ensure such behavior; if there is a well-organized and effective industrial self-regulation system in place; if there are private and independent organizations in their environment that monitor their behavior and, when necessary, mobilize to change it; if they operate in an environment where normative demands for responsible behavior are institutionalized; if trade or employer associations encourage the promotion of socially responsible behaviors; and, also, if they are engaged in an institutionalized dialogue with unions, employees, the community, investors, and other stakeholders (Campbell, 2007; Freire &...
Albuquerque Filho, 2022). Thus, different societies define the relationship between business and society differently, depending on their democratic and economic system (Werther Jr & Chandler, 2011).

Given the above, this study starts with the following research question: **What is the influence of Corporate Social Responsibility on the relationship between competitive strategies and competitiveness?** Thus, the study’s objective is to analyze the moderating effect of Corporate Social Responsibility on the relationship between competitive strategies and the competitiveness of Brazilian and French industrial companies.

The implementation of CSR in developing countries such as Brazil, according to Baskin (2006) and Silva et al. (2022), is less integrated into competitive strategies when compared to that in developed economies such as France. In this context, to test this statement that the institutional environment interferes with the relationship between competitive strategies, CSR, and competitiveness, a comparative study will be conducted using two countries with different economic and social realities, Brazil and France. According to data from the United Nations Development Programme (UNDP, 2022), Brazil ranks 87th, with an HDI of 0.754, while France ranks 28th, one of the countries with the best human development, with an HDI of 0.903. In terms of economic freedom, according to the Heritage Foundation (2023), Brazil is ranked 127th, while France is the 57th freest nation in the world. In economic terms, Brazil is the 9th largest economy in the world, and France is the 6th largest, according to the World Bank (2023).

These characteristics significantly affect several aspects of companies in the countries (Delmas, 2002), including the social and environmental practices adopted, and the study in different realities is relevant (Pinheiro et al., 2022). For Abreu et al. (2015), Brazil has an institutional environment in which society, companies, and government do not act towards CSR in a systemic and integrated way. On the other hand, according to Crawford and Williams (2010) and Oliveira et al. (2014), France is a country that has engaged in social and environmental practices since 1977, which required French companies to disclose social information.

Also, other empirical studies have compared companies from different countries involving related themes, such as social disclosure, sustainability, entrepreneurship, and CSR performance (Silva et al., 2022). Brazilian companies were analyzed compared to companies from other countries in studies such as those by Abreu et al. (2015) – Brazil and India; Albuquerque Filho et al. (2021) Brazil – Europe; Grecco et al. (2013) – Brazil and Spain; Oliveira et al. (2013) - Brazil and England; Silva et al. (2022) – Brazil, Spain, and Portugal; and Soares et al. (2018) – Brazil and Canada. It is in this scenario that this study is inserted.

In the meantime, as a theoretical contribution, the study becomes relevant because it deals with the synergy between CSR constructs and competitive strategies (intangibility, internationalization, and innovation) supported by national (Albuquerque Filho et al., 2020; De Luca et al., 2020; Medeiros & Mol, 2017; Silva et al., 2022) and foreign (Broadstock et al., 2019; Joseph et al., 2018) research and their connection with the company’s competitiveness (Freire & Albuquerque Filho, 2022; Hitt et al., 2007; Santos & Porto, 2013). Thus, considering the assumptions of IT, CSR is considered to be affected by the country’s institutional environment. In other words, different laws, norms, values, conventions, customs, and economy influence CSR and its association with the competitive strategies of companies. From this angle, research that considers CSR as a player in the relationship between competitive strategies and the company’s competitiveness can promote greater clarity about the stakeholders’ view of the company’s profits and future (Albuquerque Filho et al., 2020; Agnihotri & Bhattacharya, 2019).

As a practical contribution, the study presents the effects of CSR on the transformation of competitive strategies into competitiveness, which within what is presented in IT, which aims to explain the structure and functioning of organizations as a socially elaborated foundation (Beddewela & Herzig, 2013), contributes to the entity having a greater knowledge of
how its processes affect the social and economic context. This demonstrates to managers that adopting CSR can make companies more competitive, as Marin et al. (2012) demonstrated, which inferred a positive effect of CSR on the competitiveness of companies that follow a proactive strategy.

2 THEORETICAL FRAMEWORK

2.1 Institutional Theory in the context of Competitive Strategies, Competitiveness, and Corporate Social Responsibility

The institutional theory began in the work of Meyer and Rowan (1977), in which it was stated that many formal organizational structures arise as reflections of rationalized institutional rules. In modern states and societies, such rules represent, in part, the expansion and increased complexity of formal organizational structures. The present theory, centered on cognitive institutions that constitute players, has become a popular and powerful explanation for individual and organizational action (Beddewela & Herzig, 2013). Thus, institutional theorists have emphasized the value of organizations’ compliance with the practices and procedures prevailing in the institutional environment and adherence to external rules and standards (DiMaggio & Powell, 1983).

Companies adapt to socially accepted norms and standards by their players in their environments to use their capacities and resources to become competitive (Scoot, 1995). Competitiveness is an organization’s response to its characteristics or technology and its set of activities and combined action models (Pettigrew & Whipp, 1993b). The competitive performance of an organization has progressed from a narrow view, obtained by purely economic aspects, to a broad view, consistent with institutional theory (Zucker, 1987), highlighting that organizations are influenced by justification and social obligation (Oliver, 1997).

Influences from public entities, consumers, non-governmental organizations (NGOs), and competitors can discourage or drive organizations to develop based on their environmentally responsible initiatives (Delmas, 2002; Medeiros & Mol, 2017). The need to obtain legitimacy before its stakeholders is something that has demanded reputation, prestige, and socially responsible conduct from companies (Peeters et al., 2014; Machado-da-Silva & Barbosa, 2002).

Competitiveness is associated with developing new strategies to maintain the company’s competitive position in the market (Hamel & Prahalad, 1990). From this perspective, institutional theory can contribute to understanding companies’ competitive strategies from institutional elements, as they dedicate their resources to social initiatives, environmental protection, and social business practices (Agnihotri & Bhattacharya, 2019; Du et al., 2010). Lattemann et al. (2009) corroborate that adopting socially responsible practices results from elements belonging to the institutional environment.

Competitiveness comprises the combination of the relative efficiency of industrial activity and sustainable growth, and the organization’s ability to compete derives from its own activities, among these, CSR (Chinomona & Omoruyi, 2016; Joseph et al. 2018). The motivation of managers, stakeholders, and shareholders shapes CSR activities. Based on institutional theory, these practices can be verified and confronted in their national, cultural, and institutional environment (Matten & Moon, 2008; Silva et al., 2022).

Explicit CSR practices, for example, are linked to the responsibility assumed over some social interest and, in general, are formed by voluntary and strategic practices that correlate social gain with the generation of value of the companies that develop them. On the other hand, implicit CSR practices comprise the role played by companies in the institutional environment where they operate, intending to meet social pressures, adding values, norms, and rules that are configured in companies’ obligations to collective well-being (Matten & Moon, 2008; Silva et al., 2022).
In this context, considering CSR as a set of practices and policies that consider the expectations of stakeholders (Aguinis, 2011), from environmental aspects, economic and social interests (Knorringa & Nadvi, 2016), it is considered that the institutional theory contributes to the understanding of the impact of CSR on the company’s competitive strategies (Lourenço & Sousa-Filho, 2020) leading to competitiveness.

2.2 Competitive strategies, competitiveness, and Corporate Social Responsibility

2.2.1 Competitive strategies

Given the intense changes in the organizational environment and the increasingly fierce presence of market competition, entities face pressure to create strategies that allow their continuity (De Luca et al., 2020), making them better direct their positioning and performing management aligned with their main objective.

Creating competitive strategies is essential for the active permanence of the business, and they are designed to increase sales, profit, and organizational growth (Mulatu, 2016), thus influencing the success of the entity, reflected in the development evidenced by it (Melo et al., 2019).

2.2.2 Competitiveness

According to the widely highlighted literature, competitiveness is presented as a set of skills and action models conducted using strategies that allow a better positioning in the market and may be affected by sector instruments and sociocultural characteristics (Pettigrew & Whipp, 1993). Thus, it is linked to the management of processes and elements aimed at adapting to socially important norms and standards of conduct in the environment where it is inserted (Silva & Barbosa, 2002).

From this perspective, an entity can change over time and become more competitive to its actions in the market (Shoenmaker & Schramade, 2018). Thus, competitiveness is directly related to value creation, evidenced through an organizational strategy (Brito & Brito, 2012).

2.2.3 Corporate Social Responsibility

Corporate Social Responsibility (CSR) does not present a specific conceptualization, thus having several aspects that define it (Degenhart et al., 2018) because it has evolved over the years. Among the various meanings that are explored in the academic environment, Carroll (1979) classifies the subject into four categories according to the main motivation of the act: (a) Economic - the main function of for-profit companies; (b) Legal - because it is inserted in society, it needs to fit into the established codes and norms; (c) Ethical - concerns implicit relational codes that are not necessarily described in the form of law; and (d) Discretionary - which involves strictly voluntary actions.

CSR plays a prominent role in business performance since sustainable and socially responsible performance draws the attention of several stakeholders (Zhao et al., 2018) and can also influence several aspects that lead to greater competitiveness. Several strategies can be motivated by CSR, including performance (Albuquerque Filho et al., 2020), corporate governance (De Luca et al., 2020; Zhao, 2018), intangibility (Joseph et al., 2018), internationalization (Albuquerque Filho et al., 2020; Strike et al., 2006), and innovation (Broadstock et al., 2019; Hadj, 2019). Companies can explore intangibility, internationalization, and innovation strategies among the various competitiveness strategies.
2.2.4 Corporate Social Responsibility moderates the relationship between competitive strategies and competitiveness of Brazilian companies

Faced with numerous changes in the business environment and high market competitiveness, organizations feel pressured to create strategies that allow their continuity (De Luca et al., 2020) or even explore new spaces that permeate the environment where they are inserted. CSR is one of these elements that denote relevant strategies among the various organizational, economic, social, and environmental aspects (Brooks & Oikonomou, 2018; Freire & Albuquerque Filho, 2022), providing a differentiated vision and direction, with strategies that involve organizational systematics, practices, and responsibilities related to its performance and the interests of society (Knorringa & Nadvi, 2016).

The commitment adopted with CSR actions can contribute to constructing organizational assets and methods, including intangible assets (Freire & Albuquerque Filho, 2022; Joseph et al., 2018). These assets are characterized by intangible assets representing economic benefits for the entities, having singularities (Barney, 2001), and can be seen as differentials that offer more lasting competitive advantages (Barney, 1991). The influence of CSR in developing instruments of organizational intangibility occurs in the face of expectations and perceptions. In contrast, the very commitment preached by CSR is very connected to the ideals of intangibility, which is pointed out as fundamental for intangible corporate assets to emerge and materialize in the organization as a whole, causing the company to establish a competitive advantage (Searcy & Elkhawas 2012; Barney, 1991; Silva et al., 2022).

The competitive advantage in this relationship lies in what intangible assets can represent in the market and at the organizational level, and they are important for the company’s development. In this perspective, CSR is a fundamental instrument in the harmonization of interests between shareholders and stakeholders (Artiach et al., 2010), which can influence the organization’s intangibility, directly reflecting on financial results and ensuring the long-term continuity of resources (Medeiros & Mol, 2017). Thus, CSR helps the company’s reputation, a difficult-to-imitate intangible asset that enables greater performance and competitiveness (Joseph et al. 2018). The studies by Brzeszczyński and McIntosh (2014) found that CSR improves the company’s reputation and promotes better relationships with financial entities and investors. Thus, reputational gains (intangible assets) combined with CSR actions ultimately confer greater competitiveness (Orlitzky et al., 2003).

Also, studies present the company’s proactive social and environmental posture as something that stands out, reducing risks when entering foreign markets (Feldman et al., 1997), minimizing communication problems (Zahra et al., 2000), and making an environment conducive to international diversification. In this perspective, CSR has a relationship with the internationalization strategy, denoting itself as an element that positively influences organizational integrity, contributing to companies that intend to internationalize (Agnihotri & Bhattacharya, 2019), thus increasing the entity’s competitive advantage and market value (Hitt et al., 2007).

Internationalization consists of the expansion of organizational performance in the international scenario, which is materialized in some ways, among them, revenues from its external activities or export revenues (Masullo & Lemme, 2009), external assets (Santos et al., 2013) or even the issuance of ADRs, participation in the stock exchange, or participation in the company’s capital stock (Santos et al., 2013). Thus, the entity’s pressures are intensified to increasingly greater measures and requirements, presenting CSR practices as support for the responsiveness to its stakeholders (Kang, 2013) in the face of greater adequacy and preparation.

Among the studies that investigated the relationship between CSR and internationalization, Strike et al. (2006) studied the relationship between international diversification and the CSR of publicly traded North American companies, thus finding a positive influence between the constructs. Park et al. (2014) analyzed how foreign stakeholder groups influence CSR practices,
identifying a positive effect among subsidiary companies and various stakeholders. There is a relationship between CSR and the internationalization strategy, enabling the influence on other factors, such as competitiveness.

Furthermore, based on the premise that CSR operates with a strategy of product differentiation and, based on this notion, offers competitive advantage (Hadj, 2019), innovation is one of these strategies of great relevance to the company. According to Kuratko et al. (2015), innovation production is stimulated according to the environment where it is inserted and by several related factors. This stems from the fact that innovation capacity corresponds to a constant improvement in the ability to generate positive changes in product development to serve the market (Albuquerque Filho et al., 2020). Such effectiveness is directly linked to CSR and can generate great organizational benefits (Broadstock et al., 2019).

The literature shows that companies with CSR activities are more likely to be innovative in their processes and product generation, positively affecting their performance through these processes, thus pointing to CSR as an instrument that increases the innovation capacity of companies, thus reflecting the increase in their ability to differentiate and obtain competitive advantages (Hadj, 2019; Russo & Fouts, 1997). These processes are explored in studies such as Broadstock et al. (2019), who studied whether companies’ choices about corporate social responsibility (CSR) and environmental, social, and governance implementation strategies can positively impact their value and performance, where they could verify such effectiveness. McWilliams and Siegel (2000) empirically found a positive correlation between investments in CSR and R&D. Also in line with the work of Porter (1991) and Porter and Van der Linde (1995) that environmental regulation positively influences the performance levels of companies through the improvement of innovation and competitiveness (Broadstock et al., 2019).

Besides CSR being a force that can act moderately in transforming competitive strategies into objective competitiveness, the institutional environment of each country influences the behavior of companies (Campbell, 2007). The fact is that different societies define the relationship between business and society differently, depending on their democratic and economic system (Werther Jr & Chandler, 2011). Thus, the institutional environment may justify the existence of a different effect of CSR on competitive strategies (intangibility, internationalization, and innovation) and its subsequent impact on the competitiveness of companies in different countries. The study by Pinheiro et al. (2022), for example, conducted a comparative analysis between Brazilian and French companies and identified there is greater disclosure of CSR by French companies, considering that there is greater social and regulatory pressure for the disclosure of CSR practices in the country. Thus, it is suggested that:

\[ H_{1a}: \text{Competitive strategies positively influence the competitiveness of Brazilian companies.} \]
\[ H_{1b}: \text{Competitive strategies positively influence the competitiveness of French companies.} \]
\[ H_{2a}: \text{Corporate Social Responsibility moderates the relationship between competitive strategies and the competitiveness of Brazilian companies.} \]
\[ H_{2b}: \text{Corporate Social Responsibility moderates the relationship between competitive strategies and the competitiveness of French companies.} \]

3 METHODOLOGICAL PROCEDURES

3.1 Sample definition

The study population gathered data from 438 Brazilian companies listed on Brasil, Bolsa, Balcão (B3) S.A. – and 215 French companies listed on Nyse Euronext. In the sample composition, the International Standard Industrial Classification of all Economic Activities (ISIC) was
considered, in addition to the availability of information for constructing the study variables comprising the financial years from 2016 to 2020. As a result, a final sample of 121 companies (58 Brazilian and 63 French) was obtained.

Table 1 shows the dependent, moderating, and independent variables, as well as their metrics (description), data collection source, and theoretical support that support using the measure as representative.

**Table 1**  
*Variables used in the research*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>Source</th>
<th>Theoretical support</th>
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<tbody>
<tr>
<td><strong>Dependent variable</strong></td>
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</tr>
<tr>
<td>Competitiveness (COMPET)</td>
<td>Herfindahl-Hirschman Index</td>
<td>Capital IQ®</td>
<td>Albuquerque Filho et al. (2020); Moura et al. (2013).</td>
</tr>
<tr>
<td><strong>Moderating Variable</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate Social Responsibility (CSR)</td>
<td>CSR Hub Overall Rating (0 to 100)</td>
<td>CSR Hub base</td>
<td>Hughey and Sulkowski (2012); Westermann et al. (2017).</td>
</tr>
<tr>
<td><strong>Independent variables</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intangibility (INTANG)</td>
<td>Ratio of intangible assets to total assets</td>
<td>Capital IQ®</td>
<td>Moura et al. (2013); Ritta, et al. (2010).</td>
</tr>
<tr>
<td>Internationalization (INTER)</td>
<td>(External revenues + External assets) /2</td>
<td>Capital IQ®</td>
<td>Chen and Hsu (2010); Albuquerque Filho et al. (2020).</td>
</tr>
<tr>
<td>Innovation (INNOV)</td>
<td>Interaction between radical innovation (exploration – R&amp;D) and incremental innovation (exploitation - Capex)</td>
<td>Capital IQ®</td>
<td>Birkinshaw and Gibson (2004); Katila and Ahuja (2002); Vinekar et al. (2006).</td>
</tr>
</tbody>
</table>

Source: Prepared by the authors.

Regarding competitiveness, the Herfindahl-Hirschman Index (HHI) was used, as highlighted in Table 1. The index was calculated from Equation 1, in which $\beta_i$ corresponds to the proportion of the Asset value of company $i$ to the total value of the sample.

$$HHI = \sum_{i=1}^{n} \beta_i^2$$  
(Equation 1)

To determine Equation 1, we chose to use Asset values, as Moura et al. (2013) and Albuquerque Filho et al. (2020) have done, because, according to them, during the periods, the Asset value has less oscillation than that of any other variable, such as, for example, Operating Revenue. The result of this construct varies between the range 0 and 1. Also, the Herfindahl-Hirschman index is an inverse parameter (lower values indicate greater competitiveness).

Still in Table 1, it can be seen that CSR is the moderating variable, and it is analyzed by the rating generated by CSRHub that ranges from 0 to 100 assigned on the four main CSR performance categories (employees, environment, community, and governance). The use of this proxy has been used recurrently in the international literature. It is widely recognized as relevant for providing information using sources such as Asset4, Bloomberg, *Carbon Disclosure Project*, *Global Reporting Initiative* [GRI], *Dow Jones Index*, and United Nations sustainable performance indicators, among others, as highlighted in research by Hughey and Sulkowski (2012).

Concerning competitive strategies, the intangibility variable is analyzed through the ratio between intangible assets and total assets (Moura et al., 2013). Internationalization is measured by...
the mean between external revenues and external assets (Chen & Hsu, 2010; Albuquerque Filho et al., 2020), whereas information for applying innovation considered the interaction between radical innovation (exploration – R&D) and incremental innovation (exploitation - Capex) (Poffo, 2023).

In line with the specialized literature, the study considered as organizational control variables the company size (SIZ), represented by the Natural Logarithm of the Asset value (Albuquerque Filho et al., 2020; Moura et al., 2013) and growth (GROW), measured by dividing the Operating Revenue value in year \( t \) by that of year \( t-1 \) (Klomp & Van Leeuwen, 2001). Moreover, and considering that the sample includes companies from different countries, the following institutional control variables were used: Cultural factor (uncertainty aversion – UA) - measured by the degree to which a society feels uncomfortable due to uncertain and ambiguous situations ranging from 0 to 100 (Kaasa & Vadi, 2010); and Market Capitalization (MCAP) for companies as a % of Gross Domestic Product (Eding & Scholtens, 2017; Hsu et al., 2014).

From the variables presented, econometric models were highlighted to test the hypotheses raised in this study. Thus, the regression analysis was performed only with the independent variables that measure business strategies and then another model for the general objective specifying the moderating effect of CSR on business strategies and its subsequent impact on the company’s competitiveness. To this end, in this research, we chose to apply the multiple linear regression model with panel data since the data were collected by the same individuals over five years. Thus, the application of fixed, random, or pooled OLS panel models will take place through the Hausman, Breush-Pagan, and F-test for individual effects. In each model, the most appropriate type of effect will be used.

The econometric models of this study are defined as follows:

**Model I**

\[
COMPET = \beta_0 + \beta_1INTANG_{ij} + \beta_2INTER_{ij} + \beta_3INNOV_{ij} + \sum \beta_4-4CONTR_{ij} + u_{ij}
\]

**Model II**

\[
COMPET = \beta_0 + \beta_1INTANG_{ij} + \beta_2INTER_{ij} + \beta_3INNOV_{ij} + \beta_4CSR_{ij} + \beta_5(CSR_{ij} \times INTANG_{ij}) + \beta_6 (CSR_{ij} \times INTER_{ij}) + \beta_7 (CSR_{ij} \times INNOV_{ij}) + \sum \beta_8-4CONTR_{ij} + u_{ij}
\]

Before the regression analysis, descriptive statistics of the variables of interest of the study was performed, from which measures of central tendency and variability were extracted in order to verify a preview of the data behaviors. Also, the difference test between means (student’s t-test) was performed to compare Brazilian and French companies regarding their profile of strategies and competitiveness, considering that the data met the normality assumption. All analyses were performed using the statistical package Stata®, version 13.

4 RESULTS

Table 2 compares companies’ competitiveness through the Herfindahl-Hirschma Index, segregated by country and year, but also relative to the total sample, through its descriptive statistics. Based on the total sample, it is observed that there is a balance over the analyzed period, in which the mean level of competitiveness did not present high discrepancies, ranging between 0.27 and 0.30. It is noted that throughout the analyzed period, 2016 showed a higher mean level of competitiveness since the lower Herfindahl-Hirschma, the greater the company’s competitiveness.
Table 2

Comparison of the variable COMPET (Herfindahl-Hirschman Index) between Brazil and France

<table>
<thead>
<tr>
<th>Year</th>
<th>Brazilian Companies</th>
<th>French Companies</th>
<th>Total sample</th>
<th>T-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Standard Deviation</td>
<td>Mean</td>
<td>Standard Deviation</td>
</tr>
<tr>
<td>2016</td>
<td>0.42</td>
<td>0.14</td>
<td>0.24</td>
<td>0.05</td>
</tr>
<tr>
<td>2017</td>
<td>0.39</td>
<td>0.12</td>
<td>0.24</td>
<td>0.05</td>
</tr>
<tr>
<td>2018</td>
<td>0.37</td>
<td>0.11</td>
<td>0.23</td>
<td>0.04</td>
</tr>
<tr>
<td>2019</td>
<td>0.36</td>
<td>0.11</td>
<td>0.22</td>
<td>0.04</td>
</tr>
<tr>
<td>2020</td>
<td>0.36</td>
<td>0.11</td>
<td>0.22</td>
<td>0.04</td>
</tr>
<tr>
<td>Total</td>
<td>0.38</td>
<td>0.12</td>
<td>0.23</td>
<td>0.04</td>
</tr>
</tbody>
</table>

Source: Prepared by the authors. Note: Significance levels: ** < 0.05; * < 0.01.

Also through Table 2, it is inferred that the mean level of competitiveness over the period ranged between 0.36 and 0.42 in the Brazilian market and between 0.22 and 0.24 in the French environment. It is also noteworthy that, in the Brazilian case, the mean level of competitiveness has shown an increasing trend since 2018, and in the French case. Furthermore, the mean levels of competitiveness are higher and less discrepant for French companies compared to Brazilian companies, indicating statistically significant differences (t-test) both over the years and for the entire period.

In Table 3, CSR is compared, and its descriptive statistics are segregated by country and year. Regarding this construct, the total sample generally indicated an upward increase over the analyzed period. In France, the concern with investments in CSR is more pronounced than in Brazil in all the years analyzed. Also noteworthy is the Brazilian case, which has shown a downward trend since 2018 in its CSR, while France had the lowest CSR record in 2020. Therefore, the t-test results indicate the existence of statistically significant differences at the 1% level between the mean CSR levels of Brazilian and French companies both over the years and relative to the entire period.

Table 3

Comparison of the CSR variable between Brazil and France

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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CSR</td>
<td>Brazil</td>
<td>56.90</td>
<td>56.10</td>
<td>54.93</td>
<td>54.33</td>
<td>54.24</td>
<td>0.000*</td>
</tr>
<tr>
<td></td>
<td>France</td>
<td>58.12</td>
<td>59.45</td>
<td>56.69</td>
<td>57.77</td>
<td>56.41</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total sample</td>
<td>57.68</td>
<td>58.21</td>
<td>58.23</td>
<td>59.66</td>
<td>59.85</td>
<td></td>
</tr>
<tr>
<td>T-test –year</td>
<td>0.000*</td>
<td>0.000*</td>
<td>0.000*</td>
<td>0.000*</td>
<td>0.000*</td>
<td>0.000*</td>
<td></td>
</tr>
</tbody>
</table>

Source: Prepared by the authors. Note: Significance levels: * < 0.01

Next, Table 4 presents the descriptive statistics of business strategies by country, year, and total sample.
Table 4
Comparison of business strategies between Brazil and France

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>INTANG</td>
<td>Brazil</td>
<td>0.170</td>
<td>0.179</td>
<td>0.186</td>
<td>0.175</td>
<td>0.180</td>
<td>0.038**</td>
</tr>
<tr>
<td></td>
<td>France</td>
<td>0.294</td>
<td>0.301</td>
<td>0.286</td>
<td>0.304</td>
<td>0.304</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total sample</td>
<td>0.247</td>
<td>0.255</td>
<td>0.258</td>
<td>0.260</td>
<td>0.260</td>
<td></td>
</tr>
<tr>
<td></td>
<td>T-test –year</td>
<td>0.046**</td>
<td>0.000*</td>
<td>0.000*</td>
<td>0.000*</td>
<td>0.000*</td>
<td></td>
</tr>
<tr>
<td>INTER</td>
<td>Brazil</td>
<td>0.182</td>
<td>0.212</td>
<td>0.168</td>
<td>0.285</td>
<td>0.285</td>
<td>0.073***</td>
</tr>
<tr>
<td></td>
<td>France</td>
<td>0.490</td>
<td>0.476</td>
<td>0.496</td>
<td>0.449</td>
<td>0.456</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total sample</td>
<td>0.374</td>
<td>0.377</td>
<td>0.377</td>
<td>0.380</td>
<td>0.380</td>
<td></td>
</tr>
<tr>
<td></td>
<td>T-test –year</td>
<td>0.064***</td>
<td>0.071***</td>
<td>0.000*</td>
<td>0.000*</td>
<td>0.001*</td>
<td></td>
</tr>
<tr>
<td>INNOV</td>
<td>Brazil</td>
<td>0.933</td>
<td>1.037</td>
<td>2.498</td>
<td>1.855</td>
<td>1.865</td>
<td>0.423</td>
</tr>
<tr>
<td></td>
<td>France</td>
<td>1.882</td>
<td>2.423</td>
<td>2.485</td>
<td>2.335</td>
<td>2.465</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total sample</td>
<td>1.367</td>
<td>1.259</td>
<td>2.748</td>
<td>2.748</td>
<td>2.752</td>
<td></td>
</tr>
<tr>
<td></td>
<td>T-test –year</td>
<td>0.756</td>
<td>0.254</td>
<td>0.646</td>
<td>0.256</td>
<td>0.345</td>
<td></td>
</tr>
</tbody>
</table>

Source: Prepared by the authors. Note: Significance levels: *** < 0.10; ** < 0.05; and * < 0.01

Table 4 shows that, in the total sample, all competitive strategies (intangibility, internationalization, and innovation), in general, are upward over the years. France has a higher mean level than Brazil for competitive strategies, except for 2018, when Brazil had a higher mean level in innovation. Furthermore, the t-test showed statistically significant differences between Brazilian and French companies for the INTANG and INTER variables for the entire period or each year separately. Innovation, on the other hand, was not statistically significant in any of the cases.

Table 5 shows the multiple linear regression of panel data with fixed effects for Brazilian companies and random effects for French companies and the total sample, as indicated by the Hausman, Breush-Pagan, and F tests. As COMPET (Herfindahl-Hirschma) is an inverse parameter (lower values indicate greater competitiveness), it is expected that competitive strategies are positively associated (lower INTANG, INTER, and INNOV) with competitiveness (lower Herfindahl-Hirschma).

Table 5
Multiple linear regression of panel data (2016 to 2020)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Brazilian Companies</th>
<th>French Companies</th>
<th>Total sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model I</td>
<td>Model II</td>
<td>Model I</td>
</tr>
<tr>
<td>Intercept</td>
<td>-0.01349*</td>
<td>-0.00421*</td>
<td>-0.03886*</td>
</tr>
<tr>
<td>INTANG</td>
<td>0.00117</td>
<td>-0.00394</td>
<td>-0.00032</td>
</tr>
<tr>
<td>INTER</td>
<td>-0.00001</td>
<td>0.00092**</td>
<td>0.00003</td>
</tr>
<tr>
<td>INNOV</td>
<td>-0.00001*</td>
<td>-0.00009</td>
<td>-0.00000</td>
</tr>
<tr>
<td>CSR</td>
<td>-</td>
<td>-0.00002</td>
<td>-</td>
</tr>
<tr>
<td>(CSR x INTANG)</td>
<td>-</td>
<td>0.00009</td>
<td>-</td>
</tr>
<tr>
<td>(CSR x INTER)</td>
<td>-</td>
<td>0.00015**</td>
<td>-</td>
</tr>
<tr>
<td>(CSR x INNOV)</td>
<td>-</td>
<td>0.00000</td>
<td>-</td>
</tr>
<tr>
<td>SIZ</td>
<td>0.00074*</td>
<td>0.00074*</td>
<td>0.00186*</td>
</tr>
<tr>
<td>GROW</td>
<td>0.00000</td>
<td>-0.00000</td>
<td>0.00000</td>
</tr>
<tr>
<td>UA</td>
<td>Omitted</td>
<td>Omitted</td>
<td>-0.00002</td>
</tr>
<tr>
<td>MCAP</td>
<td>0.00000</td>
<td>0.00000</td>
<td>0.00000</td>
</tr>
<tr>
<td>R²</td>
<td>0.1553</td>
<td>0.1647</td>
<td>0.2372</td>
</tr>
<tr>
<td>F-test</td>
<td>5.88*</td>
<td>4.24*</td>
<td>191.25*</td>
</tr>
<tr>
<td>Panel Effect</td>
<td>Fixed</td>
<td>Fixed</td>
<td>Random</td>
</tr>
<tr>
<td>VIF</td>
<td>&lt;10</td>
<td>&lt;10</td>
<td>&lt;10</td>
</tr>
</tbody>
</table>

Source: Prepared by the authors. Note. Significance levels: ** < 0.05 * < 0.01.
From Table 5, it should initially be noted that the F-test of the econometric models was statistically significant at the 1% level, indicating that at least one of the independent or control variables influences the dependent variable. The results presented by the VIF denote the absence of multicollinearity between the variables.

As shown in Table 5, it is noted that when the direct influence of business strategies on competitiveness (model I) was verified, the effect of INNOV on COMPET was negative and significant in the Brazilian sample and total sample. In contrast, in the French sample, it was not significant. This result indicates a low Herfindahl-Hirschma and, consequently, greater competitiveness in Brazilian companies and a total sample resulting from their innovation. Regarding the variables INTANG and INTER, they did not present statistical significance in any of the samples. Thus, hypotheses (H1a) and (H1b) are rejected.

Regarding the analysis of the effect of CSR moderation on competitive strategies (model II), it is observed that the moderation variables (CSR x INTANG, CSR x INTER, and CSR x INNOV) presented negative and statistically significant coefficients in the total sample. In the Brazilian sample, the variables (INTER) and (CSRxINTER) had a positive and statistically significant effect, while the other strategies were not significant. In the French sample, the variables (CSR x INTANG), (CSR x INTER), and (CSR x INNOV) were negative and significant, while the competitive strategies without moderation were not significant. This result denotes that the competitiveness of French companies and the total sample increases from the moderation between CSR and competitive strategies (this is because the lower Herfindahl-Hirschma, the greater the competitiveness of the company), while in the Brazilian sample internationalization, as well as its interaction with CSR, reduces competitiveness. Thus, based on this result, (H2a) is rejected, and (H2b) is accepted.

Regarding the control variables, SIZ showed positive statistical significance in all models and samples, while GROW was negative and significant in model II of the total sample. Regarding the institutional control variables Cultural factor (uncertainty aversion – UA) and Market capitalization (MCAP), they did not present statistical significance in any of the models.

5 DISCUSSION

The research analyzes the moderating effect of corporate social responsibility on business strategies (intangibility, internationalization, and innovation) and its subsequent impact on the competitiveness of Brazilian and French companies. Analyzing these constructs between Brazil and France is essential since it addresses institutionally distant countries.

Regarding competitiveness, the results showed statistically significant differences between the two countries. In the French scenario, the mean level of competitiveness is higher than in the Brazilian environment. According to Albuquerque Filho et al. (2020) and Moura et al. (2013), when the Herfindahl-Hirschma index (COMPET) has a value below 0.20, competition tends to be perfect, when it is between 0.20 and 0.60, it forms an oligopoly. When it is above 0.60, it has a monopoly. In this case, both Brazil and France fall between 0.20 and 0.60, indicating that industrial companies dominate the offer of their products and services under the surveillance of the behaviors and practices of their competitors.

Regarding CSR, the results of French companies are superior to those of Brazilian companies, with statistically significant differences. Despite this, there is a growth to this construct in both countries. Thus, this result suggests, as Christmann (2004) exposed, that companies have been formulating and implementing CSR policies through permanent dialogue with their stakeholders. Moreover, following Matten and Moon (2008), it is possible that French companies, given that they are subject to greater pressures in their institutional environment and focusing on explicit CSR activities, are more limited to implicit CSR practices. On the other hand, companies
in Brazil, because they are inserted in a more permissive institutional environment than the French, tend to focus more on explicit CSR practices.

Thus, this finding is in line with Mahmood et al. (2019), who highlighted that CSR practices are higher in developed countries (France) due to pressure from various stakeholders, media coverage, and customers’ environmental awareness, but also due to the institutional environment where companies are inserted. Furthermore, as Oliveira et al. (2013) pointed out, factors such as beliefs, moral values, and culture are associated with responsible behavior in Brazil and France, with companies of the latter being more pressured to act following the country’s social and institutional standards. In Brazil, society, companies, and the government do not conduct systemic and integrated CSR actions (Abreu et al., 2015). At the same time, in the French environment, there is a greater engagement of social and environmental practices by the various stakeholders (Oliveira et al., 2014).

Also, when analyzing the differences between competitive strategies in Brazil and France, it is noted that the difference between countries focuses on intangibility and internationalization. Regarding intangibility, according to Broadstock et al. (2019), De Luca (2020), Hadj (2019), and Tsai et al. (2012), it is natural that in environments with greater competitiveness, the level of intangible assets is higher, which may justify the fact that French companies present a more representative and prominent level than Brazilian companies. Furthermore, because they have a higher level of CSR that gives visibility to a diversity of audiences, it is possible that France, as it has a more favorable regulatory environment and guarantees investment protection, will expand its markets using internationalization as an alternative to increasing its competitive capabilities (Albuquerque Filho et al., 2020).

This means that in an environment with high competition, such as the French, companies invest in CSR practices to obtain competitive differentials, in order to enter new markets (internationalization) or even to adjust goods and services following consumer demands in exclusive markets (Degenhart et al., 2023). In Brazilian companies, in turn, although there has been an increase in CSR practices in recent years, factors such as geographic isolation, communication problems (language), economic, geographic, regulatory, and legal cultural differences, and especially ethical and business practice issues hinder the internationalization process (Albuquerque Filho et al., 2021).

It is also noteworthy that when analyzing the econometric models, the total research sample (model I) and the Brazilian sample (model I) indicated companies' greater competitiveness due to their innovation potential. In the French sample, innovation was not statistically significant. This finding is consistent with the results of Strike et al. (2006) and Park et al. (2014). Innovation, according to Ipsmiller & Dikova (2021), is seen as a strategy that strengthens the level of competitiveness and helps overcome economic and institutional constraints, especially in countries with emerging economies (Brazil).

The results of the interaction of CSR in competitive strategies (intangibility, internationalization, and innovation) showed in the total sample (model II) that moderation between the constructs enables companies to increase their competitiveness. In the Brazilian sample, companies tend to be less competitive when internationalizing. In the same way, investing in CSR as it internationalizes also reduces their competitiveness. On the other hand, in the French sample, focusing on investments in CSR while investing in intangible assets, internationalization, or innovation enables companies to increase their competitiveness.

Thus, it is clear that CSR actions are considered to maintain greater competitiveness based on the strategies adopted by the companies, thus being sustained by the institutional characteristics of the place where they are inserted (Balkyte & Tvaronavičiene, 2010). In the French scenario, the return on profit margins tends to be lower as it is more competitive. This makes company managers
act ethically and not opportunistically, with investments in CSR being decisive for maintaining their corporate strategies and, therefore, the sustainability of their competitiveness (Sheikh, 2018).

Barney (1991) and Albuquerque Filho et al. (2020) point out that companies begin to obtain competitive advantages over each other through the implementation of strategies that strengthen their internal strengths to prevent their external threats and internal weaknesses directly through the configurations of the competitive environment. Thus, the ability of companies to increase their competitiveness depends on their versatility in changing or developing new strategies. However, based on the institutional theory, the company must promote actions that improve welfare and support not only its interests but also that of society to obtain greater competitiveness. Therefore, CSR is relevant in increasing competitiveness when interacting with intangibility, internationalization, and innovation strategies, especially in countries with an institutional environment with stronger and well-applied regulations that allow for well-organized and effective industrial self-regulation (Campbell, 2007).

6 CONCLUSION

The results showed that in Brazilian companies, innovation enables greater competitiveness for companies, while CSR positively affects the internationalization process and, consequently, reduces competitiveness. On the other hand, the strategies of French companies are affected by their CSR actions. This means that their strategies (intangibility, internationalization, and innovation) are moderated by their CSR investments, increasing their competitiveness.

From the analysis of the total sample, it was found that the company's contextual characteristics (CSR actions) shape its competitive strategies and enable greater competitiveness. In the managerial field, the study demonstrates the influence of CSR on its strategies. The results show that although companies in Brazil and France present significant differences relative to their intangibility and internationalization, independent variables of the study and used as metrics of competitive strategies, CSR allows the company to obtain greater competitiveness in its niche from its moderate performance with the company’s strategies, making it possible to see that, even in the face of different realities, they are measures of great relevance and that enable better positioning of the business. The same goes for innovation, even though there are no statistically significant differences between both countries.

From the analysis of the effect of CSR on competitive strategies, it was possible to understand similarities and differences of influences in different markets, exposed here through Brazilian and French companies, allowing information to be evidenced on specific characteristics and organizational points that direct the shareholder to better decision making. This generally seeks to know factors that may influence these markets to make better investments, thus inferring a greater direction of information that guides the decision-making process.

Therefore, the study contributes to increasing the understanding of the relationship between the constructs, demonstrating, based on Institutional Theory, that the factors of the contextual environment (e.g., CSR) to the organization can influence its strategies, with subsequent impacts on its competitiveness, in addition to helping the limited body of knowledge on the effect of CSR on strategies that contribute to increasing the competitiveness of companies, in institutionally distant countries, such as Brazil and France, thus having a highly relevant relationship with the social and economic environment of the business.

However, it should also be noted that the results and considerations presented present subsidies for analyzing organizations only in the market of Brazilian companies listed on B3 and French companies listed on Nyse Euronext, limited to these organizations. For future research, it is suggested to use different measures to measure competitiveness or even its relationship with other organizational factors relevant to decision-making, such as information quality, corporate governance, and life cycle. It is also suggested that the study be replicated in other markets to
analyze similarities and differences considering their particularities or even use another moderating effect.

The application of this study can also be conducted by comparing other market realities, such as the BRICS countries, or even by specific organizational sectors, allowing a greater knowledge of certain areas and types of organizations.

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Heritage Foundation (2023). *The index of economic freedom*. D.C: Heritage Foundation


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