



Relationship between Debt and Market Performance Moderated by ESG Performance and Corporate Controversies of Companies Listed in G20 Countries

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Abstract

The research seeks to verify how ESG performance and corporate controversies influence the relationship between debt and market performance. The research is characterized as descriptive in relation to its objective, in terms of procedures it is considered as applied research based on the collection of secondary data, and quantitative in relation to the approach to the problem. 1,215 companies listed in G20 countries were analyzed over a 10-year period. The results, obtained through the hierarchical linear model and clusters, indicate that ESG performance strengthened the relationship between debt and market performance. This evidence confirms the theoretical formulation that a company attentive to ESG issues reduces information asymmetry, improves its relations with stakeholders, attracts more investors, which also facilitates the capture of better loan conditions, contributing in general to the generation of wealth for the organization. The study contributed as it clarifies the relevance of ESG as a strategic factor that can influence the relationship between debt and market performance and, at the same time, ESG controversies intensify this same positive relationship.

Keywords: ESG, ESG Controversies, Indebtedness, Market Performance, G20.

Resumo

A pesquisa busca verificar como o desempenho em ESG e as controvérsias corporativas influenciam a relação entre endividamento e desempenho de mercado. Quanto ao objetivo, a pesquisa caracteriza-se como descritiva; em termos de procedimentos, é considerada uma pesquisa aplicada, baseada na coleta de dados secundários; e, quanto à abordagem do problema, é quantitativa. Foram analisadas 1.215 empresas listadas em países do G20 ao longo de um período de 10 anos. Os resultados, obtidos por meio de modelo linear hierárquico e análise de clusters, indicam que o desempenho em ESG fortalece a relação entre endividamento e desempenho de mercado. Essa evidência confirma a formulação teórica de que uma empresa atenta às questões de ESG reduz a assimetria de informações, melhora suas relações com stakeholders, atrai mais investidores e também facilita a captação de empréstimos em melhores condições, contribuindo, de forma geral, para a geração de riqueza para a organização. O estudo contribuiu ao esclarecer a relevância do ESG como um fator estratégico capaz de influenciar a relação entre endividamento e desempenho de mercado e, ao mesmo tempo, que as controvérsias em ESG intensificam essa mesma relação positiva.

Palavras-chave: ESG; Controvérsias em ESG; Endividamento; Desempenho de Mercado; G20.

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1 Introduction

Over time, topics such as sustainability, sustainable development, corporate social responsibility, and ESG have been widely discussed from numerous perspectives. Since the 2030 Agenda, research on corporate engagement with the SDGs has intensified, with an emphasis on business practices and activities focused on sustainable development (Vildåsen, 2018; Boiral; Heras-Saizarbitoria & Brotherton, 2019). It is known that it was in 2015 that the UN established the Sustainable Development Goals (SDGs). In total, 17 goals with 169 targets were defined to address global challenges related to sustainability and encourage companies—especially large multinationals—to adopt sustainable practices and disclose information about their sustainable development initiatives (Toukabri & Mohamed, 2023).

Climate change, global warming, melting glaciers, pollution, ecological imbalance, depletion of natural resources, child labor, slave labor, abusive workplace relationships, and gender inequality are being treated as the world's most challenging problems (Deng & Cheng, 2019; Alareeni & Hamdan, 2020; Chodnicka-Jaworska, 2021). In this sense, society has been pressuring organizations to pay attention to the environmental and social changes that their operations have caused, demanding more sustainable behavior with less impact on society and the environment (Hamrouni, A., Boussaada, R., & Toumi, 2019; Chodnicka-Jaworska, 2021; Raimo, Caragnano, Zito, Vitolla, & Mariani, 2021).

Based on this position, companies, in addition to thinking about their performance, are having to consider social and environmental issues in which they are involved (Lassala, Apetrei, & Sapena, 2017). There is a desire to rethink production processes, seeking to reduce environmental and social damage, while at the same time considering improving organizational performance. Thus, concern about the impacts of the production process on the environment, the risk of natural resource scarcity, and responsibility in social relations have required companies to implement sustainable actions, so that more and more companies have become engaged in environmental, social, and corporate governance (ESG) (Nossa, Rodrigues, Nossa, 2017; Alareeni & Hamdan, 2020).

The company's involvement in environmental, social, and governance (ESG) actions considers the interests of shareholders, but also values the demands and rights of other stakeholders, which improves the company's reputation and reliability among stakeholders (Al Amosh, Khatib, Alkurdi, & Bazhair, 2022; Srivastava, Sampath & Gopalakrishnan, 2022; Zheng, Wang, Sun, & Li, 2022). On the other hand, the significant attention given to ESG issues has also highlighted companies' involvement in negative and undesirable events (ESG controversies), such as accidents and environmental disasters, poor working conditions, fraud, child labor, and slave labor (Aouadi & Marsat, 2018; Shakil, 2021).

Amid pressure from stakeholders to act proactively on ESG issues, there is a need to meet one of the main organizational objectives, which is to maximize profits and the performance of the company as a whole (Narang, 2018; Rashid, 2018; Al Amosh, Khatib, Alkurdi, & Bazhair, 2022). Therefore, monitoring the company's performance and analyzing aspects that may influence it is essential to help the organization remain viable in the long term (Mughtar, Mat Nor, Albra, Arifai, & Ahmar, 2018). Furthermore, ESG protection actions require investments, and it is necessary to consider the existence of good performance that meets these needs.

One way to assess a company's wealth-generating capacity and future performance is through market performance, as this refers to a prospective measurement, i.e., it concerns investors' expectations about the company's ability to generate profits in the future (Kumarasinghe, Will, & Hoshino, 2018). Considering that ESG actions do not generate immediate results and may take some time to have an effect on organizations (Chen, Ngniatedema & Li, 2018), it can be argued that they are linked to monitoring the company's long-term performance, such as market performance. Furthermore, evidence shows that the market reacts positively to positive ESG events and negatively to adverse ESG events (Rahman, Aziz, & Hughes, 2020).

Among the possibilities for improving performance, one of the issues analyzed by companies refers to the use of debt, as it is an alternative for obtaining resources at the lowest cost to finance their investments (Narang, 2018). By using third-party resources, the company gains the financial capacity to expand its

operations, invest in reformulation, upgrade and expand machinery, and develop new products, all of which can help improve organizational performance.

Despite the benefits of ESG, the search for improved market performance has been based in the literature on financial elements (capital structure, financing capacity, financing restrictions) as drivers of better performance, and in most cases, non-financial factors such as ESG end up being neglected (Han, Zhuangxiong, & Jie, 2018). Thus, even with the growing number of studies investigating ESG issues in the organizational field, limited attention has been paid to the impact of non-financial issues such as ESG on companies' financial transactions (Aouadi & Marsat; 2018; Han, Zhuangxiong, & Jie, 2018; Nirino, Santoro, Miglietta, & Quaglia, 2021; Raimo, Caragnano, Zito, Vitolla, & Mariani, 2021).

In this context, the objective of this research is to assess the influence of ESG performance and corporate controversies on the relationship between indebtedness and market performance. To this end, we formulated the hypotheses that there is a positive relationship between indebtedness and market performance (H1), that the relationship between indebtedness and market performance is positively influenced by the company's level of ESG performance (H2), and that the level of ESG controversies in which the company is involved mitigates the positive relationship between indebtedness and market performance (H3).

Given that many managers consider ESG investments to be constraints rather than opportunities (Hamrouni, Boussaada, & Toumi, 2019), one of the practical contributions of this study is precisely the ability of ESG to bring benefits to organizations. Thus, by understanding the interaction between ESG, indebtedness, and market performance, companies can rethink their pursuit of wealth generation, also considering the demands of various stakeholders and the preservation of ESG issues. From the perspective of the UN's 2030 Agenda, which establishes the 17 Sustainable Development Goals (SDGs), this study corroborates by discussing not only financial performance but also the generation of sustainable value and the balance between economic growth and socio-environmental responsibility, central principles of the 2030 Agenda.

Furthermore, by investigating the role of corporate controversies, the research provides input for corporate policies that seek to mitigate reputational risks and promote ethical and transparent governance, strengthening the business sector's contribution to global sustainable development. This article reviews the literature on the subject, discusses the hypotheses, describes the methodological procedures, highlights the main results, and concludes with final observations and references.

2 Theoretical Framework and Research Hypotheses

When entering into the discussions that underpin the hypotheses of this study, it is first important to conceptualize stakeholder theory, which aligns with the dimensions addressed in this research. This theory maintains that the ESG behavior of organizations is oriented toward satisfying the demands and protecting the interests of stakeholders, constituting an important means of communication and transparency between the company and its stakeholders, which contributes to reducing information asymmetry (Zheng, Wang, Sun & Li, 2022). Stakeholder Theory suggests benefits for companies compatible with ESG concerns. The board's commitment to this agenda will lead to a lower probability of negative events and help them to be better equipped for periods of crisis and economic recessions. Furthermore, these companies have the support of various stakeholders (Bodhanwala & Bodhanwala, 2023).

Based on Stakeholder Theory, authors Bodhanwala and Bodhanwala (2023) hypothesize that ESG has a positive effect on stock market performance during periods of crisis. However, the evidence does not corroborate this proposition, although the fact that the study only analyzes Indian companies may be a limitation and call for further investigation. In times of crisis, stakeholder salience theory is useful because companies respond differently to the demands of different stakeholders based on their power and urgency (Bodhanwala & Bodhanwala, 2023).

Analyzing Chinese companies, Yin, Li, and Su (2023) showed that ESG performance positively impacts stock returns. This demonstrates that organizations should not only be accountable to their shareholders. According to Stakeholder Theory, the various other stakeholder groups that are affected by the company's operations should also have their demands responsibly met, thus developing sustainable and ethical businesses that benefit everyone involved (Yin, Li, & Su, 2023). As the interests of various stakeholders gained importance in the organizational context, several policies and legal provisions were developed to meet and defend their demands, including environmental conservation, emissions reduction, climate change mitigation, and product safety, as prescribed by ESG, which stand out as aspects to be considered in corporate decision-making (Yin, Li, & Su, 2023).

An effective relationship with key stakeholders, according to Stakeholder Theory, can translate into competitive advantage, which in turn can result in financial improvements (Khalil & Nimmanunta, 2023). Seeking to analyze the impact of innovation (conventional and green) on the financial and operational performance of companies, authors Khalil & Nimmanunta (2023) found that innovation is beneficial to company value, however conventional innovation comes at the expense of the environment, posing a threat and contributing to carbon emissions, while green innovation is advantageous for any type of company performance, even attracting environmentally proactive investors. Thus, the competitive advantage brought about by the environmental proactivity of organizations is evident. Based on Stakeholder Theory, this action leads to greater external visibility and possibly reinforces a positive perception in the eyes of the company's main stakeholders (Khalil & Nimmanunta, 2023). These studies show how Stakeholder Theory can be used as a lens to aid analysis in the organizational field. Thus, Stakeholder Theory and its applicability are highlighted, corroborating the importance of meeting the demands of other stakeholders for the success and maintenance of the company in the market. Furthermore, an organization focused on meeting the needs of its various stakeholders will likely gain more trust, improving its reputation and signaling lower risks, including for its credit providers.

When addressing the topic of credit, one delves into the relationship between indebtedness (or debt contracting) and organizational performance, an association that has been widely investigated by several researchers. However, the results found in the literature have generated divergent debates, due to the mixed evidence observed in empirical studies (Muchtar, Mat Nor, Albra, Arifai, & Ahmar, 2018; Ahmed & Afza, 2019; Akhtar, Yusheng, Haris, Ain, & Javaid, 2022; Ghardallou, 2022; Boshnak, 2023). Initially, the seminal study by Modigliani and Miller (1958) stands out as one of the first to analyze the influence of debt on company value. When analyzing the positive influence of debt on organizational performance, it can be argued that, since Modigliani and Miller (1963), debt has been treated as beneficial to organizations, describing that, in a corporation with a leveraged capital structure, the market value of the company's shares will be higher than the market value of a corporation with less debt.

Even with references to the risks and costs of bankruptcy linked to indebtedness, the focus of this analysis is to investigate the benefits that indebtedness can bring, rather than the possibility of risking an organizational crisis (Modigliani & Miller, 1963; Muchtar, Mat Nor, Albra, Arifai, & Ahmar, 2018; Akhtar, Yusheng, Haris, Ain, & Javaid, 2022; Homapour, Su, Caraffini, & Chiclana, 2022). One piece of evidence for the statistically significant positive effect of debt on market performance is the research by Muchtar, Mat Nor, Albra, Arifai, and Ahmar (2018), which found that leverage positively affects Tobin's Q.

The study by Obeidat, Al-Tamimi, and Hajjat (2021) showed a positive relationship between indebtedness and market performance. The authors justify the results due to the tax benefit that leverage provides, as it helps reduce the company's cost burden. However, even with this evidence, they warn that excessive use of debt should not be neglected, as it will expose the company to financial risks of bankruptcy and agency (Obeidat, Al-Tamimi & Hajjat, 2021). Based on the evidence presented from investigations into the effect of debt on market performance, and in line with Stakeholder Theory, the first hypothesis (H1) of this thesis is presented, which aims to verify this relationship.

H₁: There is a positive relationship between indebtedness and market performance.

Although numerous studies have investigated the relationship between indebtedness and market performance, little attention has been paid to non-financial issues that may influence this relationship (Raimo, Caragnano, Zito, Vitolla, & Mariani, 2021). As the current global context has led to an increased focus on environmental, social (Freudenreich, Lüdeke-Freund, & Schaltegger 2020), and governance issues in the organizational field, it is important to also examine these issues in financial relationships. Even if ESG concerns are not the main objective of companies, disregarding ESG can negatively influence their future market performance (Alareeni & Hamdan, 2020).

When looking back at history, it is worth remembering that the term ESG was proposed in 2004 by the United Nations Principles for Responsible Investment (UN PRI) in a report developed by twenty financial institutions (Alareeni & Hamdan, 2020; Gillan, Koch, & Starks, 2021; Zheng, Wang, Sun, & Li, 2022). In 2015, the definition of the Sustainable Development Goals (SDGs) by the United Nations further expanded the dissemination of the term ESG in discussions around the world, and several countries initiated regulatory processes to encourage the development of ESG performance (Zheng, Wang, Sun, & Li, 2022).

The growing emphasis on ESG issues has also increased their relevance in the organizational field, as society is increasingly pressuring companies to have sustainable behavior with less impact on the community and the environment (Raimo, Caragnano, Zito, Vitolla, & Mariani, 2021; Signori, San-Jose, Retolaza, & Rusconi, 2021). The acronym ESG refers to how organizations integrate environmental, social, and governance concerns into their businesses, which signals that concern for these issues has also become relevant for companies, and not just financial performance (Gillan, Koch, & Starks, 2021).

As mentioned, ESG performance consists of three dimensions: environmental, social, and corporate governance. An organization's environmental performance concerns any action related to the environment, discussing water use, energy consumption, waste emissions, pollution, use and conservation of natural resources, as well as behaviors in relation to fauna and flora (Alareeni & Hamdan, 2020; Delvia, Efni, & Haryetti, 2022). A company with good ESG performance increases stakeholder confidence, attracting more investors (Alareeni & Hamdan, 2020; Delvia, Efni, & Haryetti, 2022).

Environmental performance information also refers to the company's operational policies regarding its impact on the environment, i.e., how the company has been concerned with and planned to improve and reduce its interference with the environment (Raimo, Caragnano, Zito, Vitolla, & Mariani, 2021). Environmental performance analyzes a company's impact on living and non-living natural systems, including air, land, and water, as well as entire ecosystems (Chodnicka-Jaworska, 2021). It reflects how an organization uses the best management strategies to avoid environmental risks and capitalize on environmental opportunities, generating long-term value (Chodnicka-Jaworska, 2021).

Another dimension of ESG, social performance, analyzes an organization's behavior in relation to how it interacts with its employees, community, suppliers, consumers, and the media, as well as its concern with improving the quality of life and society, promoting health, social equity, job quality, diversity, opportunity, human rights, gender policies, and product responsibility (Alareeni, & Hamdan, 2020; Raimo, Caragnano, Zito, Vitolla, & Mariani, 2021; Delvia, Efni, & Haryetti, 2022). A company that uses good management practices to improve its social performance improves its ability to build trust and loyalty with its workforce, customers, and society (Chodnicka-Jaworska, 2021; Refinitiv Eikon, 2022).

In this way, a company with good social performance improves its relationship with stakeholders, has more satisfied customers, and more qualified employees, which consequently increases its competitive advantage (Alareeni, & Hamdan, 2020; Delvia, Efni, & Haryetti, 2022). A company's social performance can be analyzed as a reflection of its reputation and its license to operate, which are key factors in determining its ability to generate value in the long term (Chodnicka-Jaworska, 2021; Refinitiv Eikon, 2022). In fact, adopting socially responsible practices is one of the main organizational techniques used to improve and sustain trust with stakeholders (Alareeni, & Hamdan, 2020).

With regard to another dimension of ESG, corporate governance, a company's processes and systems are analyzed to verify the compatibility of the actions of directors and executives with the realization of the organization's long-term objectives (Chodnicka-Jaworska, 2021). Corporate governance reflects a company's ability to direct and control the rights and responsibilities of its managers through the use of best management practices, the creation of incentives, and the use of checks and balances in order to generate value for the organization (Chodnicka-Jaworska, 2021; Refinitiv Eikon, 2022). Information on corporate governance performance relates to the structure and function of the board, executive compensation, and the company's political involvement (Raimo, Caragnano, Zito, Vitolla, & Mariani, 2021).

Corporate governance performance refers to procedures used by the organization to coordinate its activities in order to improve the business, generating value for shareholders and also considering the demands of other stakeholders (Alareeni, & Hamdan, 2020). A company with good corporate governance performance has a good internal management process, which increases its compliance, reduces information asymmetry (Delvia, Efni, & Haryetti, 2022), provides more useful information to users of financial statements, and helps the company improve its processes (Alareeni & Hamdan, 2020).

In this way, ESG has the capacity to improve the company's reputation with stakeholders, protecting the organization against risks and even positively impacting its ability to maintain and improve its market value (Han, Zhuangxiong & Jie, 2018; Al Amosh, Khatib, Alkurdi, & Bazhair, 2022). This is because investors seek companies with good ESG practices to invest in, as these organizations demonstrate a commitment to stakeholders and increase third-party confidence in the company (Campos-Rasera, Passos, & Colauto, 2021).

In general, companies with good ESG performance reduce information asymmetry with their stakeholders, increase their confidence, and as a reward are subject to fewer capital restrictions, having access to better forms of financing (Cheng, Ioannou, & Serafeim, 2014). This is because, through ESG disclosures, companies provide users with extra-financial information that aids in decision-making, satisfying the interests and expectations of their stakeholders, including credit providers, in addition to signaling the company's long-term perspective, which attracts more sources of debt financing (Hamrouni, Boussaada, & Toumi, 2019).

In this way, stakeholders support companies with good ESG performance due to their ability to reduce transaction costs, improve competitive advantage, and drive corporate value. Given the aforementioned benefits of good ESG performance for organizations and its ability to influence both indebtedness and market performance, the second hypothesis of this study suggests that ESG is analyzed as a moderator in the initial relationship.

H₂: The relationship between indebtedness and market performance is positively influenced by the level of ESG performance of the company.

On the other hand, organizations' lack of commitment to ESG issues can lead to the company's involvement in negative and undesirable events such as pollution, fraud, child labor, and environmental crimes, referred to in the literature as ESG controversies (Aouadi & Marsat, 2018; Chodnicka-Jaworska, 2021; Shakil, 2021). Improper behavior by companies in relation to ESG issues damages their relationship with stakeholders, compromising their reputation and legitimacy, which can consequently result in a decrease in market value (Aouadi & Marsat, 2018; Li, Haider, Jin, & Yuan, 2019).

Companies involved in actions that harm society and the environment are penalized by investors, as these actions negatively influence the organization's relationship with all its stakeholders (Aouadi & Marsat, 2018; Li, Haider, Jin, & Yuan, 2019). A company's involvement in ESG controversies is so concerning because it tends to have an even stronger and more lasting negative impact on its market value than environmental and social protection actions (Price & Sun, 2017).

ESG scandals ultimately increase the company's risks, sending a negative signal for the organization's future and even serving as an early indicator of a higher-than-expected risk of litigation (Aouadi & Marsat, 2018;

Fauser & Utz, 2021; Xue, Wang, Yang, & Linnenluecke, Jin & Cai, 2023). With the increase in risks and the company's negative reputation, financing costs also rise, as financial agencies end up demanding higher interest rates for companies with ESG controversies, aiming to balance these uncertainties (Xue, Wang, Yang, Linnenluecke, Jin & Cai, 2023).

Thus, given that poor ESG performance ultimately damages the company's legitimacy and reputation and increases borrowing costs, it is important to invest in positive ESG actions that broaden stakeholder acceptance and mitigate reputational risks, leading to lower financing costs (Horobet, Smedoiu-Popoviciu, Opreescu, Belascu & Pentescu, 2024). Thus, it is essential to analyze the effect of ESG controversies on the relationship between indebtedness and market performance, so that hypothesis 3 aims to verify this relationship.

H₃: The level of ESG controversies in which the company finds itself mitigates the positive relationship between indebtedness and market performance.

In presenting the three hypotheses of this study, it should be noted that all are aligned with Stakeholder Theory, which offers a useful lens for understanding the relationships investigated here, in the sense of creating organizational value that is in line with the organization's various stakeholders. According to this approach, companies should consider and serve the interests of all stakeholders, not just those of their shareholders (Freeman, 1984). Thus, for a company to be successful today, it is not enough to improve its performance and satisfy the interests of shareholders. It is equally necessary to consider and meet the demands of other stakeholders, who have different perceptions of value, but whose participation is essential for the functioning and continuity of the organization (Teixeira, Nossa, & Funchal, 2011).

Therefore, even with the growing number of investigations into ESG in the organizational field, these have not yet been sufficient to outline a definition of its effects on companies' financial issues (Rahman, Aziz, & Hughes, 2020). Given the growing appreciation of ESG by various stakeholders, it is important for organizations to consider that non-financial issues such as ESG are relevant and have the capacity to influence financial decision-making, and even help to improve the company's valuation (Raimo, Caragnano, Zito, Vitolla, & Mariani, 2021; Al-Dhamari, Al-Gamrh, Farooque, & Moses, 2022).

3 Methodological Procedures

The research is descriptive in terms of its objective, applied in terms of procedures based on secondary data collection, and quantitative in terms of its approach to the problem. The target population defined for analysis in this study was companies listed on the stock exchanges of the 20 countries that make up the G20 group. The G20 has high economic representativeness because it concentrates the main global economies (32 developed and 11 emerging), representing more than 80% of the world's gross domestic product (GDP), 60% of the world's population, and 75% of global trade (Mahajan & Majumdar, 2021; Boliari & Topyan, 2022).

The population comprised a total of 47,494 organizations collected from the Refinitiv Eikon® database, from which several companies were excluded to compose the analyzed sample. Initially, companies that did not present data on market performance were excluded. Next, companies that did not provide data on indebtedness were excluded. After these exclusions and based on the position of Lee, Byun, and Park (2018), companies belonging to the financial sector were also excluded. Subsequently, companies that did not provide ESG data were excluded. The final sample was reduced to 1,215 companies in each year, so that a balanced panel was used, totaling 12,150 observations, since the period analyzed covered 10 years (2013-2022). Figure 2 below presents the research construct.

Relationship between Debt and Market Performance Moderated by ESG Performance and Corporate Controversies of Companies Listed in G20 Countries

Figure 1

Research Construct

	Variables	Formula	Authors
Independent Variable			
Debt	Total Interest-Bearing Debt (TID)	$(\text{Loans and Financing} + \text{Debentures (both Short-term and Long-term)}) / \text{Total Assets}$	Pamplona, Ames, & Silva (2020); Pamplona, Silva & Nakamura, (2021).
Dependent Variable			
Market Performance	Tobin's Q (TQB)	$(\text{VM} + \text{DIVT}) / \text{Total Assets}$	Muchtar, Mat Nor, Albra, Arifai, & Ahmar (2018); Akhtar, Yusheng, Haris, Ain, & Javaid (2022); Ghardallou (2022); Boshnak (2023)
Moderating Variable			
	ESG	Refinitiv Eikon®	Chodnicka-Jaworska (2021); Srivastava, Sampath, & Gopalakrishnan, (2022). Aouadi, & Marsat, (2018);
	ESG Controversies (CTR)	Refinitiv Eikon®	Shakil, Tasnia, & Mostafiz, (2021); Chodnicka-Jaworska (2021).

Legend: MV: market value; DIVT: book value of total debt.

The independent variable refers to indebtedness, which is measured based on total interest-bearing debt. Total interest-bearing debt refers to debts linked to interest and financial expenses such as loans, financing, and debentures (Pamplona, Ames, & Silva, 2020). The dependent variable in this analysis is market performance, measured by Tobin's Q. Tobin's Q refers to the ratio of the market value of equity plus the book value of total debt divided by the total asset value of the company (Salim & Yadav, 2012; Le & Phan, 2017; Muchtar, Mat Nor, Albra, Arifai, & Ahmar, 2018; Akhtar, Yusheng, Haris, Ain, & Javaid, 2022). Tobin's Q is a forward-looking analysis of a company's performance, indicating the market's opinion of how much value can be generated per unit of assets.

ESG performance metrics and ESG controversies were used as moderating variables. The overall ESG score used is based on self-reported information on the environmental, social, and corporate governance dimensions of companies. Refinitiv Eikon® provides an annual measurement of this information for each organization on a scale of 0 to 100, with the closer this indicator is to 100, the better the company's ESG performance. The ESG controversy score is fully automated and objective, measuring the company's exposure to environmental, social, and governance controversies, as verified by the company's involvement in negative events reported by the global media. Refinitiv Eikon® measures the ESG controversy score from 0 to 100, with a higher ESG controversy score indicating fewer controversies related to the company (Refinitiv Eikon, 2022). This variable thus highlights the company's involvement in any ESG scandal that has been reported by the media and is frequently updated in the Refinitiv Eikon® database as events occur and are reported in the media.

The procedures for data analysis can be summarized in three steps:

(i) Initially, descriptive statistics were performed on the research variables, in which the mean, median, standard deviation, minimum, and maximum of the analyzed variables were verified. This procedure is important because, according to Fávero, Belfiore, Silva, & Chan (2009), descriptive statistics enable the researcher to better understand the behavior of the analyzed data.

(ii) The second stage concerns the methodological procedure used for cluster analysis, which allows objects to be segregated into groups that are relatively homogeneous internally and heterogeneous among themselves (Fávero, Belfiore, Silva, & Chan, 2009). This procedure made it possible to separate the companies

analyzed into different groups according to the variation in their ESG performance (low/Level 1, medium/Level 2, high/Level 3), which was operationalized with the aid of SPSS 25 (Statistical Package for Social Sciences) software.

In cluster analysis, observations are grouped based on parameters such as similarity or dissimilarity, allocating similar observations to the same group (Fávero, Belfiore, Silva, & Chan, 2009). According to Hair et al. (2005), the characteristics of each object are combined into a measure of similarity (similarity or dissimilarity) that allows comparison between objects and association with similar objects. Distance measures represent dissimilarity; the higher the value, the lower the similarity between objects (Fávero, Belfiore, Silva, & Chan, 2009). In this study, Euclidean distance was used, as it is one of the main distance measures discussed in the literature on cluster analysis (Fávero, Belfiore, Silva, & Chan, 2009). Euclidean distance is obtained according to the following equation:

$$DE_i = \sum_{j=1}^p (x_{ij} - x_{i'j})^2 \quad (1)$$

Where:

X_{ij} is the j -th characteristic of the i -th individual;

$X_{i'j}$ is the j -th characteristic of the i' -th individual.

The algorithm used for cluster grouping in this study was the non-hierarchical method, since this method has a lower probability of making incorrect classifications in the groupings (Fávero, Belfiore, Silva, & Chan, 2009). The non-hierarchical agglomeration procedure is described by Carvalho & Mingoti (2005) as a method that aims to find the participation of n elements in k groups, presenting internal cohesion and isolation of the clusters formed. Among the non-hierarchical models, the most popular is K-Means (Fávero, Belfiore, Silva, & Chan, 2009). The K-means non-hierarchical clustering procedure can be used when the number of observations is large, as in the case of the present study (Malhotra, 2006). The K-Means method consists of three steps (Marôco, 2018; Fávero, Belfiore, Silva, & Chan, 2009):

1° - Initial participation of individuals in k clusters defined by the analyst;

2° - Calculate the centroids for each of the k clusters and calculate the Euclidean distance from the centroids to each subject in the database (in SPSS, the first n observations are used as centroids for the k clusters, or the analyst can define which centroid values to use).

3° - Group the subjects into the clusters whose centroids are closest, and return to step 2 until there is no significant variation in the minimum distance of each subject to each of the centroids of the k clusters.

(iii) The third procedure adopted was the Hierarchical Linear Model (HLM) or Linear Mixed Models (LMM). This choice is due to the fact that classical statistical analysis considers individual/independent observations, so that effects of context, social organization, culture, etc. are not considered. However, it is necessary to consider that data groups are organized into complex hierarchical structures conceptualized at different aligned hierarchical levels (Marôco, 2018). The MLH model was developed to analyze data that have a group structure, i.e., that consider the dependence of data at each level and between hierarchical levels (Marôco, 2018).

The Simple Linear Regression model is given by $Y_i = \beta_0 + \beta_1 X_i + \varepsilon_i$, where i is the individual's level, but this model considers that there are no differences between the groups defined at the levels. Considering a two-level MLH given by $Y_{ij} = \beta_{0j} + \beta_{1j} X_{ij} + \varepsilon_{ij}$, we have the relationship of the dependent variable Y at level 1 with one (or more) independent variable(s) X_{ij} measured at level 1, but assuming that this (these) effect(s) may vary at level 2.

Thus, in the present study, to answer Hypothesis H1: There is a positive relationship between indebtedness and market performance, Simple Linear Regression was applied using SPSS 25 software, according to the following model:

$$DM_i = \beta_0 + \beta_1 END_i + \varepsilon_i \quad (2)$$

ESG levels were incorporated into this initial model, making the adoption of MLH plausible. To answer Hypothesis H₂: The relationship between indebtedness and market performance is positively influenced by the company's ESG performance level, as follows:

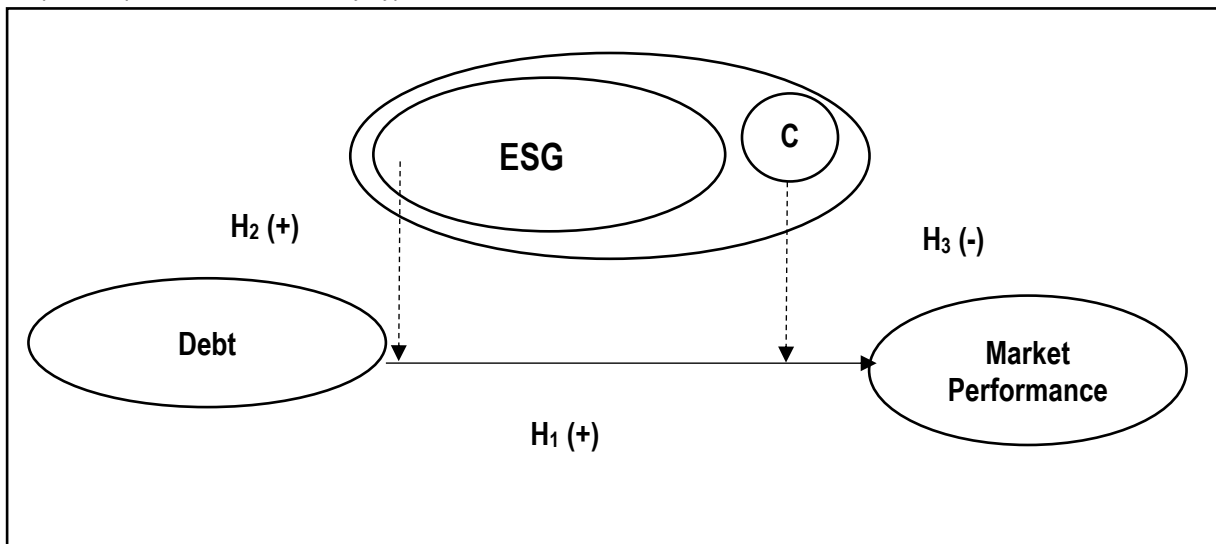
$$DM_{ij} = \underbrace{\gamma_{00} + \gamma_{01}ESG_j + \gamma_{10}END_{ij}}_{\substack{\text{Efeitocomum, donívele} \\ \text{dogrupo}}} + \underbrace{\gamma_{11}ESG_j \times END_{ij} + u_{1j}END_{ij}}_{\substack{\text{EfeitodonívelnoEndividamento}}} + \underbrace{u_{0j} + \varepsilon_{ij}}_{\text{Erros}} \quad (3)$$

The company's negative actions in relation to ESG are also significant, so it is relevant to verify the influence of ESG Controversies in this relationship, which was proposed as hypothesis H₃: The level of ESG controversies in which the company finds itself mitigates the positive relationship between indebtedness and market performance, which was verified in:

$$DM_{ij} = \underbrace{\gamma_{00} + \gamma_{01}C_j + \gamma_{10}END_{ij}}_{\substack{\text{Efeitocomum, donívele} \\ \text{dogrupo}}} + \underbrace{\gamma_{11}C_j \times END_{ij} + u_{1j}END_{ij}}_{\substack{\text{EfeitodonívelnoEndividamento}}} + \underbrace{u_{0j} + \varepsilon_{ij}}_{\text{Erros}} \quad (4)$$

Therefore, in this study, indebtedness is analyzed as an independent variable and market performance as the dependent variable. ESG performance and ESG controversies are used as moderating variables in this main relationship, as illustrated in Figure 1 below.

Figure 2
Graphical representation of the study hypotheses



Source: Own elaboration (2024).

4 Results and Analyses

The descriptive statistical analysis in this study examines company data, addressing the mean, median, standard deviation, minimum, and maximum of each variable investigated. Table 1 presents the statistical details of the sample before the division of clusters.

Table 1*Descriptive statistics of the variables analyzed*

Variables	Mean	Median	Standard Deviation	Minimum	Maximum
EOT	0,2810	0,2635	0,1746	0,0000	2,0610
QTB	1,4822	1,2434	0,7382	0,3087	8,3961
CTR	86,4416	100	26,9420	0,6329	100
ESG	54,6652	57,2562	20,1411	0,9055	95,9876

Legend: TDI: total debt burden; Tobin's Q; CTR: ESG disputes; ESG (environmental, social, and corporate governance).

As detailed in Table 1 in relation to total onerous debt, the maximum value was 2.0610, the minimum was 0.0000, and the average was 0.2810, making it clear that in the sample analyzed, some companies did not have onerous debt in the period investigated. With regard to QTB, the sample analyzed presented a maximum value of 8.3961, a minimum of 0.3087, and an average of 1.4822. This average QTB value is higher compared to other studies. Mughtar, Mat Nor, Albra, Arifai, and Ahmar (2018) presented an average QTB of 1.0147, a minimum of 0.1012, and a maximum of 3.2280. Similarly, the average QTB reported by Akhtar, Yusheng, Haris, Ain, and Javaid (2022) was 1.371, with a minimum of 0.117 and a maximum of 216.380. Similarly, in the study by Ghardallou (2022), which had an average QTB of 0.4520, with a maximum of 0.9650 and a minimum of 0.0230, when analyzing companies listed on the Tadawul stock exchange (Saudi Arabia) (country) from 2017 to 2020.

In relation to ESG performance, the average presented in the companies in the sample was 54.6652, with a minimum of 0.9055 and a maximum of 95.9876, considering that the ESG variable provided by Refinit Eikon ranges from 0 to 100. the average obtained in the sample (54.66) shows that the companies analyzed had intermediate or median ESG performance, with potential for improvement, even though the maximum found in the sample (95.98) was close to the maximum score for the variable. Compared to other studies, the values of the sample analyzed are higher, since in the study by Srivastava, Sampath, and Gopalakrishnan (2022), the ESG had an average of 40.118, a minimum of 5.120, and a maximum of 84.660. Similarly, the study by Aouadi and Marsat (2018) also presented lower ESG performance values, with an average of 50.4, a minimum of 1.2, and a maximum of 99.9. Similarly, in the study by Shakil (2021), ESG had an average of 49.458, a minimum of 11.7500, and a maximum of 89.0600.

ESG controversies had a maximum value of 100, a minimum of 0.6329, and an average of 86.4416. Considering that the metric provided by Refinit Eikon for ESG controversies ranges from 0 to 100, it can be inferred from the average value (86.44) that the companies analyzed were rarely mentioned by the global media in controversial events related to ESG. This average value of ESG controversies presented in the sample company was higher than that reported in the study by Aouadi and Marsat (2018), which presented an average ESG controversy value of 19.8, with a minimum of 0.000 and a maximum of 100, and also higher than that reported in the study by Shakil (2021), in which ESG controversies generated an average of 44.0167, with a minimum of 0.1900 and a maximum of 64.1800. It should be reiterated that the studies cited used the same database for scoring ESG controversies, Refinitiv Eikon®. In order to answer the first hypothesis H1 – There is a positive relationship between indebtedness and market performance, Table 2 shows non-rejection, since it was evident that there is a positive relationship between total costly indebtedness and market performance.

Table 2*Relationship between total costly debt and market performance*

Parameter	Estimate	Error	GI	t	Sig
Intercepto	1,415816	0,012671	12150,000	111,737	0,000
EOT	0,236187	0,038305	12150,000	6,166	0,000

Legend: EOT: total costly debt.

This result can be interpreted in the same way as that highlighted by Modigliani and Miller (1963), indicating that in the sample analyzed, the tax benefits generated by indebtedness have the capacity to reduce the cost of capital and maximize the value of the company. This result is in line with that reported by Muchtar, Mat Nor, Albra, Arifai, and Ahmar (2018), who also showed that debt positively affects Tobin's Q. According to these authors, debt improved the market performance of companies in the Indonesian. This result was also reported by Obeidat, Al-Tamimi, and Hajjat (2021), justifying the positive and significant effect of indebtedness on market performance due to the tax benefits that indebtedness provides, as it helps reduce the company's cost burden.

Analyzing this relationship based on the Stakeholder Theory, it is understood that stakeholders consider debt important for improving market performance and generating wealth. This factor may be linked to the financial resources available from debt, as they will support investments and new opportunities in companies, with the possibility of serving the various stakeholders in the joint process of wealth generation. Thus, according to Stakeholder Theory, the results obtained in this regression may indicate that debt is a signal to the market that the company has the capacity to meet the demands of stakeholders. As shown in Table 3, the hypothesis that ESG influences the relationship between indebtedness and market performance is not rejected, as there are indications that ESG performance has a positive influence on the relationship between EOT and DM.

Table 3
Influence of ESG performance on the relationship between total costly debt and market performance

Parameter	Estimate	Error	gl	t	Sig
Intercept	1,478708	0,020901	12150	70,748	0,000
EOT	0,223706	0,066184	12150	3,380	0,001
NESG=1	-0,224460	0,033227	12150	-6,755	0,000
NESG=2	-0,050116	0,029330	12150	-1,709	0,088
NESG=3	0	0	.	.	.
NESG=1 * EOT	0,254688	0,097699	12150,000	2,607	0,009
NESG=2 * EOT	-0,144065	0,090299	12150,000	-1,595	0,111
NESG=3 * EOT	0	0	.	.	.
Equations of the coefficients obtained					
Level 1	DM = (1,478708-0,224460) + (0,223706+0,254688) EOT DM = 1,254248+0,478394 EOT				
Level 2	DM = (1,478708 -0,050116) + (0,223706-0,144065) EOT DM = 1,428592 +0,079641 EOT				
Level 3	DM = 1,478708 +0,223706 EOT				

Legend: EOT: total costly debt; NESG=1: level 1 ESG performance (low); NESG=2: level 2 ESG performance (medium); NESG=3: level 3 ESG performance (high).

It can be seen that at level 1 (low) ESG performance, the coefficient is higher, this coefficient decreases when companies are at level 2 (medium) ESG performance and increases again when companies are at level 3 (high) ESG performance. Initially, it should be noted that this positive result is in line with what is theoretically recommended by this study. The results are consistent with evidence that companies concerned with ESG actions improve their relationship with stakeholders, reduce information asymmetry, tend to receive more support from stakeholders, and even attract more investors (Hamrouni, Boussaada, & Toumi, 2019; Srivastava, Sampath & Gopalakrishnan, 2022). Thus, the results obtained confirm the potential of ESG to assist in generating wealth for the company, based on the benefits it provides to organizations.

In this sense, it can be argued that the evidence reported points to the understanding that ESG can be used as an effective tool to improve the company's reliability and creditor support, facilitating access to better financing conditions, which contribute to the company's valuation (Hamrouni, Boussaada, & Toumi, 2019; Zheng, Wang, Sun, & Li, 2022). Investors are seeking companies that are attentive to ESG issues to invest in, as these companies demonstrate commitment and respect for their various stakeholders (Campos-Rasera, Passos, & Colauto, 2021).

Stakeholder Theory helps to understand these results, in the sense of reinforcing the importance of valuing the diversity of interests of its stakeholders, because, as described by Freudenreich, Lüdeke-Freund, and Schaltegger (2020), if stakeholders consider environmental and social protection valuable, these aspects need to be included in the processes of value creation and distribution. In view of the reported results, as companies begin to include ESG concerns in their business, there is improvement in stakeholder relations and the process of wealth generation through debt is favored.

Analyzing the evidence of the impact of ESG performance levels on companies, a higher coefficient is observed in the low ESG performance level (level 1), as was observed when analyzing environmental performance individually. One explanation for this fact may be in line with the need for essential investments for the organization to have good ESG performance (Alareeni & Hamdan, 2020), so that even with low environmental performance, the existence of financing at this stage may be a positive indication to the market that the company has the financial capacity to improve its ESG performance.

At the medium level of ESG performance, the coefficient was lower, so it can be interpreted that companies with medium levels of ESG performance do not attract as much attention from investors because they exhibit behavior considered adequate in ESG terms, that is, these companies are moderately meeting environmental, social, and corporate governance requirements. At the high level of ESG performance, the coefficient increased again, so one explanation for this may be that these companies, because they have better levels of ESG performance, stand out from the rest, attracting more attention from investors.

The fact that companies with low ESG performance had a higher coefficient than companies with high ESG performance is related to the phenomenon of greenwashing. According to Wang, Xing, and Zhang (2024), greenwashing refers to the gap between a company's discourse and practice in relation to ESG performance, such that companies' disclosures regarding ESG performance may not be authentic behavior. These same authors describe that organizations may use greenwashing to deceive stakeholders, especially credit providers, in order to obtain better financing options. Based on this position, a possible interpretation may be aligned with the fact that high ESG performance may be a sign of greenwashing for investors, thus explaining the lower coefficient for these companies.

In general, according to the results obtained, there is support for not rejecting hypothesis H2– The relationship between indebtedness and market performance is positively influenced by the company's ESG performance level. Meanwhile, meeting the demands of various stakeholders through ESG favors market performance through indebtedness. Furthermore, this analysis responds to the general objective proposed by this study of assessing the influence of ESG performance on the relationship between indebtedness and market performance. The fact that a company has good ESG performance does not exempt it from involvement in negative events related to ESG issues, and it is important to verify this aspect in the relationship investigated. Thus, Table 4 aims to present the influence of ESG controversies on the relationship between total costly debt and market performance.

As shown in Table 4, there are indications that ESG controversies have a positive influence on the relationship between total costly debt and market performance, but there was no significance for ESG controversy levels. In analyzing the behavior of ESG controversy levels, level 2 had a higher coefficient, while the lowest coefficient was identified in level 3 of ESG controversies, that is, in those companies that are less involved in scandals related to ESG issues.

These results lead to an understanding that is opposite to what is recommended in the literature and suggested in hypothesis H3 proposed by this study. This result is in opposition to studies that describe ESG controversies as destructive to reputation, questioning legitimacy, and responsible for reducing the market value of the companies involved (Aouadi & Marsat, 2018; Li, Haider, Jin, & Yuan, 2019; Shakil, 2021). In fact, the reference that ESG controversies exert negative forces on company results due to the devaluation suffered by stakeholders (Price & Sun, 2017; Chodnicka-Jaworska, 2021) is contrary to the evidence reported in this study.

Table 4

Influence of ESG controversy performance on the relationship between total costly debt and market performance

Parameter	Estimate	Error	gl	t	Sig
Intercept	1,417494	0,013991	12150,000	101,316	0,000
EOT	0,231418	0,042407	12150	5,457	0,000
NCTR=1	-0,030311	0,046442	12150,000	-0,653	0,514
NCTR=2	0,011348	0,042903	12150	0,265	0,791
NCTR=3	0	0	.	.	.
NCTR=1 * EOT	0,007952	0,139638	12150,000	0,057	0,955
NCTR=2 * EOT	0,048927	0,128266	12150	0,381	0,703
NCTR=3 * EOT	0	0	.	.	.
Equations of the coefficients obtained					
Level 1	DM = (1,478708-0,224460) + (0,223706+0,254688) EOT DM = 1,254248+0,478394 EOT				
Level 2	DM = (1,478708 -0,050116) + (0,223706-0,144065) EOT DM = 1,428592 +0,079641 EOT				
Level 3	DM = 1,478708 +0,223706 EOT				

Legend: EOT: total costly debt; NG=1: level 1 ESG controversy performance (low); NG=2: level 2 ESG controversy performance (medium); NG=3: level 3 ESG controversy performance (high).

However, the results found by this investigation regarding ESG controversies are in line with the primary analysis by Aouadi and Marsat (2018), who documented ESG controversies having a surprisingly significant and positive effect on company market value. However, in subsequent additional analyses, these authors suggest that ESG controversies do not increase company value, but conversely seem to attract investors' attention to ESG scores, which in turn increase company value. In this sense, Nirino, Santoro, Miglietta, and Quaglia (2021) add that ESG practices should serve as a means to avoid ESG controversies, which are detrimental to company performance.

A possible explanation for the evidence presented in this study may be in line with the arguments of Aouadi and Marsat (2018). The authors reiterate that ESG controversies are not intentional disclosures by companies, but rather disclosures made by the global media that put companies in the spotlight, so that it can be argued that they play the role of an event that attracts the attention of investors, but are linked to negative behaviors of the company in relation to ESG (Aouadi & Marsat, 2018). Thus, the results obtained show evidence that ESG controversies positively influence the relationship between indebtedness and market performance, due to the prominence of these events in the media, which attract the attention of investors, even though ESG controversies are essentially negative.

Based on these results, the evidence points to the rejection of hypothesis H3– The level of ESG controversies in which the company finds itself mitigates the positive relationship between indebtedness and market performance, as the results were not significant. Furthermore, contrary to the hypothesis, the results surprisingly suggest that ESG controversies intensify the positive relationship between indebtedness and market performance, rather than mitigating it as proposed by the hypothesis. In summary, Figure 3 presents a summary of the hypotheses suggested by this study, indicating whether they were rejected or not, as can be seen below.

Considering initially the direct relationship between indebtedness and market performance, the first hypothesis can be confirmed. This evidence indicates that indebtedness has the capacity to positively influence market performance, which can be explained by the tax benefits that indebtedness provides, as reported by Muchtar, Mat Nor, Albra, Arifai, and Ahmar (2018) and Obeidat, Al-Tamimi, and Hajjat (2021). Stakeholder Theory sheds light on this scenario by highlighting the need to consider the demands of the various stakeholders in achieving organizational objectives, since, according to Freeman (1984), each group of stakeholders contributes vitally to the success of the company, including credit providers, specifically analyzing this relationship.

Figure 3*Summary of confirmed and unconfirmed hypotheses*

	Hypothesis	Result
H ₁	There is a positive relationship between indebtedness and market performance.	Not rejected
H ₂	The relationship between indebtedness and market performance is positively influenced by the company's ESG performance level.	Not Rejected
H ₃	The level of ESG controversies in which the company finds itself mitigates the positive relationship between indebtedness and market performance.	Rejected

Regarding the second hypothesis researched, it was found that ESG performance has the capacity to positively influence the relationship between indebtedness and market performance, confirming the second hypothesis. Thus, there is support for inferring that by including ESG concerns in their business, companies enhance wealth generation through indebtedness. This relationship can be interpreted by the benefits provided by the inclusion of ESG practices in companies, as they improve relationships with stakeholders, increase the company's reliability, and facilitate access to better credit conditions (Lin, Pujiastuti & Hsieh, 2021; Zheng, Wang, Sun, & Li, 2022).

Stakeholder Theory is fundamental to understanding this result, since, according to Freudenreich, Lüdeke-Freund, and Schaltegger (2020), a company is not limited to itself, but is composed of joint value creation processes, in which various stakeholders interact as recipients and creators/co-creators of value. Thus, the assumption of Stakeholder Theory is the basis for interpreting the results obtained in the sense that integrating ESG concerns into the business presupposes a commitment to the demands of various stakeholders, who collaborate in the process of creating value for the company that will be mutually beneficial to the various stakeholders. In this sense, recognizing this process in the company's is essential for the various stakeholders to maintain their interest in continuing as part of the organization's system, avoiding the disengagement of business partners (Clarkson, 1995).

With regard to ESG controversies, it was not possible to confirm the third hypothesis. Thus, there is no evidence to prove that the company's involvement in undesirable conduct related to pollution, poor working conditions, child labor, bribery, fraud, among other negative ESG-related information, harms wealth generation through indebtedness. Furthermore, the results obtained indicate that the company's involvement in these controversial ESG events may intensify the relationship between indebtedness and market performance, in line with the findings of the study by Aouadi and Marsat (2018). Thus, even though ESG controversies are essentially negative, they can signal ESG investment opportunities to investors, which in turn will have positive effects on the generation of organizational value.

5 Final Considerations

This study aimed to assess the influence of ESG performance and corporate controversies on the relationship between debt and market performance. Stakeholder Theory was used as a basis for understanding the problem analyzed. This approach argues that organizational success is achieved when the needs of various stakeholders are met, and it is no longer sufficient for organizations to focus solely on obtaining profits for their shareholders. It was found that indebtedness is a positive signal to investors, contributing to the company's market valuation. This aspect can be explained by the tax benefit that debt provides, as well as by the commitment of managers to generate a profitable cash flow capable of meeting obligations.

It was also found that ESG performance enhanced the relationship between indebtedness and market performance, confirming the theoretical formulation that a company attentive to ESG issues reduces information asymmetry, improves its relationships with stakeholders, attracts more investors, which also facilitates the obtaining of better loan conditions, contributing in general to the generation of wealth for the organization. In addition, surprisingly, ESG controversies intensified the positive relationship between indebtedness and market performance. An indication for organizations in this regard is the fact that scandals involving environmental and

social actions reported by the global media end up attracting negative evaluations for companies, while at the same time pressuring them to invest in ESG actions in an attempt to reverse the damage caused, with these subsequent ESG reactions driving wealth generation.

Thus, this study served to reinforce the importance of value creation and distribution, because as companies begin to include ESG concerns in their business, there are improvements in stakeholder relations and the process of wealth generation through debt is favored. Therefore, it reinforces the relevance of ESG as a strategic factor that can influence the relationship between debt and market performance. At the same time, ESG controversies intensify this same positive relationship.

In light of these findings, this study offers theoretical contributions to foster discussion on ESG performance and ESG controversies in the organizational field, highlighting their importance in complementing financial statements. Furthermore, the individual analysis of the environmental, social, and governance dimensions also expands the contributions by providing insights into how each dimension contributes individually to the performance of organizations.

Likewise, this study also contributes by providing evidence that validates Stakeholder Theory as a conceptual framework that aids in understanding the process of wealth generation in organizations, while also encouraging consideration of the demands and collaboration of the various stakeholders in the business. As a practical contribution, this study signals to managers the importance of investing in the implementation of ESG actions, given the benefits and opportunities they provide for companies, including contributions to obtaining third-party resources and organizational performance. In addition, companies and managers need to advance in understanding and incorporating the purposes of the 2030 Agenda, strengthening ESG initiatives.

The scientific rigor used in preparing this study does not exempt it from limitations. The first limitation to be highlighted is the fact that few companies are disclosing information about their environmental, social, and corporate governance (ESG) performance. This scenario reinforces the need for managers to take a more active and strategic role in promoting corporate transparency and conducting practices aligned with sustainability. In this sense, knowledge and understanding of the urgency of the issue emerge as determining factors.

Managers who recognize the relevance of ESG and understand its short- and long-term impacts tend to develop corporate policies that are more responsive to social and environmental demands. The second limitation worth mentioning is the lack of standardization. ESG-related performance tends to vary across sectors and countries, influenced by cultural, contextual, and political-institutional differences, as well as the lack of a uniform model for ESG reporting.

Following the investigations in this study, some possibilities for future research are suggested. Initially, as recommendations for new studies to be conducted on this topic, we suggest an additional analysis to verify how the investigated problem behaves in different sectors (polluting and non-polluting), since ESG performance may vary according to the sector to which the company belongs, as some activities are more polluting than others. It is also considered that future research may analyze ESG dimensions in isolation, as moderators in the relationship between indebtedness and market performance, in addition to separating the analysis by country (developed and emerging).

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