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ARTICLE

The influence of sustainable governance and innovation on socio-environmental performance: a multivariate analysis of companies listed on the Brazilian Corporate Sustainability Index

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Abstract

Purpose – This study aimed to analyze the impact of innovation and sustainable governance on the socio-environmental performance of companies in the Brazilian capital market by focusing on those listed on the Corporate Sustainability Index (ISE).

Theoretical framework – The theoretical framework of this study, designed to substantiate the research hypotheses, comprises two sections that address the influence of sustainable corporate governance and innovation on socio-environmental performance.

Design/methodology/approach – This descriptive, quantitative study used documentary data sources and four multiple linear regression models to analyze the relationship between the variables.

Findings – The results revealed that innovation and sustainable corporate governance significantly influence the social and environmental performance of the listed companies. The study demonstrated that sustainable governance and investments in innovation can improve organizational socio-environmental performance. Overall, sustainable governance and innovation had a greater impact on social performance than environmental performance, indicating a stronger alignment with the social pillar of sustainability in the context analyzed.

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Practical & social implications of research – The contributions of this study reach different stakeholders and have the potential to help companies improve their sustainability approaches by considering governance and innovation. Furthermore, the study contributes to the state of the art in the field of research on governance, innovation, and socio-environmental performance in Brazil and other emerging economies.

Originality/value: Notably, no other analyses investigating the impact of innovation and sustainable corporate governance performance on socio-environmental performance in the context of the ISE were identified. In this sense, the research reinforces our understanding of the relationship between sustainable corporate governance, innovation, and socio-environmental performance.

Keywords: Social performance, environmental performance, sustainable corporate governance, innovation, sustainability.

1 Introduction

Concern for corporate sustainability has risen as an interdisciplinary agenda in the scientific field and a developing topic in the business environment. This reflects modern social, economic, and environmental needs in the face of rapid economic growth, increasing global business competition, and growing social and environmental concerns (Abid et al., 2024; Baig & Yadegaridehkordi, 2023).

In recent years, there has been increasing recognition of the importance of integrating social, environmental, and economic performance, as well as the role of companies in this context (Lin et al., 2022; Rehman et al., 2021). This transformative process is influenced by a wide range of factors, including changes in government regulations, political developments, technological advances, and pressures exerted by various stakeholders involved in the business environment (Khan et al., 2023).

In emerging economies, despite evidence showing that social and environmental investments enable competitive advantage, institutional weaknesses and dynamic business environments impact companies' sustainable performance, creating uncertainty for businesses (Machado et al., 2024; Mazzioni et al., 2024; Siaw et al., 2022).

Studies have shown that sustainability-oriented governance and innovation are associated with the socio-environmental performance of companies in emerging markets and play a crucial role in sustainable performance within the corporate environment (Chen et al., 2024; Ma et al., 2024; Mazzioni et al., 2024; Mejía et al., 2024). Recent studies have focused on the sustainable performance of the Brazilian capital market and the process of measurement through sustainability indices, which cover the traditional social, environmental, and economic pillars. Analyses investigating the levels of organizational sustainability on the Brazilian Stock Exchange (B3 S.A.) commonly address issues related to governance and innovation performance (Almada et al., 2020; Bastos et al., 2024; Oliveira, 2024; Silva & Lucena, 2019).

In light of the above, the present study aims to analyze the impact of innovation and sustainable corporate governance on the socio-environmental performance of companies in the Brazilian capital market. The study will focus on companies listed on the Corporate Sustainability Index (ISE) from 2021 to 2023 due to data availability and the assumption that these organizations are more sustainably aligned. Although the Corporate Sustainability Index is called this in English, the study will use the official acronym, the ISE (Índice de Sustentabilidade Empresarial), as it is used by the B3, the Brazilian stock exchange, even in communications with the international community. This quantitative study will use four multiple linear regression models to analyze the relationship between the variables.

The research presents potential contributions to various stakeholders. Notably, no other analyses investigating the impact of innovation and sustainable corporate governance performance on socio-environmental performance in the context of the ISE have been identified, particularly given the recent nature of the data used in this study. Therefore, this study may fill theoretical gaps and contribute to the state of the art regarding the interaction between innovation, corporate governance, and the sustainability agenda in the Brazilian business environment. More broadly, it may offer insights for similar studies in other emerging economies.

In the practical field, the results can help managers, investors, and other stakeholders understand the importance of investing in sustainable corporate governance and innovation to improve socio-environmental performance and ensure business continuity. In this way, it can contribute to the development of integrated environmental, social, and governance (ESG) practices

by aligning sustainability dimensions with these other aspects. The next sections present the following rhetorical movements: theoretical framework, which addresses the impact of sustainable corporate governance and innovation on socio-environmental performance and develops this study's hypotheses; methodological procedures; analysis and discussion of results; and final considerations of the study.

2 Impact of sustainable corporate governance on socio-environmental performance

Sustainable corporate governance can be defined as a governance model that incorporates sustainable practices into business management, taking into account not only shareholders' interests, but also the environmental, social, and governance impacts throughout the decision-making process. In this sense, this governance model considers the performance and integration of the pillars of sustainability within governance practices, as well as their impact on the interests of the stakeholders involved (Chen et al., 2021; Naeem et al., 2022; Velte, 2022).

The adoption of socially and environmentally oriented practices has become necessary and crucial for companies in modern societies. Considering the global challenges related to social and environmental issues, developing efficient governance systems has significant potential to help address socio-environmental matters (Abedin et al., 2023; Wahidahwati & Ardini, 2021). The role of corporate governance in socio-environmental responsibility has gained increasing academic attention, largely due to evidence supporting a positive relationship between social, environmental, and governance performance (Mititean & Ghigiu, 2024; Peng et al., 2023; Sailesh & Reddy, 2024; Tran, 2023).

A sustainable corporate governance structure influences environmental, social, sustainable, and overall business performance through its domains of ownership, boards, and management. These domains define the company's strategic direction, monitor corporate responsibility practices, and align management with shareholders' interests, including environmental and social issues (Choi et al., 2020; McGuire et al., 2012; Khan & Liu, 2023; Sebastianelli et al., 2025; Walls et al., 2012).

However, the impact of sustainable corporate governance on socio-environmental performance varies according to the social, economic, environmental, and political context in which companies operate (Tan, 2024). For instance, empirical evidence shows that companies in emerging countries may experience reduced benefits from investments in corporate governance aligned with environmental and social objectives due to higher equity costs caused by political uncertainties (Gregory, 2023).

The business environment in emerging countries differs greatly from that of developed nations. In Latin America, a variety of contextual factors demonstrate the necessity and role of corporate governance in developing and improving environmental and social practices. These factors include challenges faced by boards due to controlling groups' influence, excessive capital ownership concentration, high barriers imposed by various stakeholders, low institutional investor participation, low stock market liquidity, limited sustainable investment portfolio diversity, and a generally unfavorable business environment for sustainability and sustainable corporate governance (Khamisu et al., 2024; Lavin & Montecinos-Pearce, 2021).

Based on the evidence and theoretical and empirical discussions reviewed, the first two hypotheses of this study are defined:

H_1: Sustainable corporate governance positively influences the social performance of companies listed on the Corporate Sustainability Index (ISE) of the Brazilian Stock Exchange.

H_2: Sustainable corporate governance positively influences the environmental performance of companies listed on the ISE.

The hypotheses are supported by the theoretical framework of this section, which demonstrates the fundamental role of sustainable corporate governance in improving long-term social and environmental performance (Abedin et al., 2023; Chen et al., 2021; Wahidahwati & Ardini, 2021). Additionally, previous studies have identified the positive correlations between the variables (Mititean & Ghigiu, 2024; Peng et al., 2023; Sailesh & Reddy, 2024; Tran, 2023).

Despite the complex nature of the relationship between the variables (Tan, 2024) and the characteristic challenges of emerging economies (Gregory, 2023), including the Latin American context (Khamisu et al., 2024; Lavin & Montecinos-Pearce, 2021), studies show that companies that adopt sustainable governance practices often achieve better social and environmental responsibility results (Choi et al., 2020; McGuire et al., 2012; Khan & Liu, 2023; Sebastianelli et al., 2025; Walls et al., 2012). The aforementioned studies highlight the role of sustainable corporate governance in enhancing

business performance in terms of social and environmental responsibility, demonstrating that effective governance structures are a means to and a result of good socio-environmental performance.

3 Impact of corporate innovation on socio-environmental performance

As one of the most important drivers of the business sector, innovation is a key component in integrating and harmonizing the sustainability agenda with economic objectives. It is often positively associated with social, environmental, and economic performance in the business domain (Aftab et al., 2022; Doni & Fiameni, 2024; Zhang et al., 2022). Responsible companies must consider the social and environmental impacts of their economic activities and production processes. In this context, innovation is a critical and strategic factor in responding to environmental, social, and economic challenges. Innovative companies respond more quickly to these challenges than less innovative ones (Ruggiero & Cupertino, 2018).

Therefore, the creation of sustainable innovations represents a promising path in the face of growing concerns over resource scarcity, environmental degradation, and social inequality. Innovative performance positively affects the triple bottom line, as it positively impacts social and environmental performance, which in turn improves a company's economic performance (Mantikei et al., 2020; Weidner et al., 2021). However, given the broad nature of innovation and its distinct interaction with different business models, the effects of innovative performance vary depending on the economic activities and contexts in which businesses operate (Chen & Jiang, 2024).

In the environmental sphere, investments in innovation have shown their ability to help combat global warming and extreme climate events by developing technologies capable of reducing greenhouse gas (GHG) emissions, including the transition processes of energy matrices and the development of green products. There is clear and significant evidence that innovation significantly affects these processes (Benkraiem et al., 2023; Cheng et al., 2024; Li et al., 2020; Liu et al., 2024; Wedari et al., 2023; Vitale et al., 2023; Zhang et al., 2021).

Green innovation promotes innovative activities aimed at fostering the coordinated development of the economy, society, and the environment. It is based on a new business paradigm that uses advanced technology to reduce ecological destruction and pollution and improve natural resource utilization. This impacts environmental, social, and business sectors (Li et al., 2022).

Innovation grounded in sustainability principles is considered a necessary and effective path toward enhancing social sustainability in business (Khan, 2016). Social innovation in business demonstrates strong potential to foster and enable the inclusion of individuals with innovative capabilities, providing them with opportunities for economic productivity and employment. Business models increasingly integrate economic and social dimensions through innovative approaches (Mongelli & Rullani, 2017), embedding innovation within them. Based on the above and the empirical and theoretical evidence gathered, the last two hypotheses of this study are defined:

H_3: Corporate innovation positively influences the social performance of companies listed on the ISE.

H_4: Corporate innovation positively influences the environmental performance of companies listed on the ISE.

In light of the discussions about the central role of innovation in corporate sustainability, it is clear that innovation not only drives economic performance but also plays a fundamental role in addressing the social and environmental challenges faced by companies. The promotion of sustainable innovations that focus on reducing environmental impacts and using resources efficiently offers a promising path to integrating economic objectives with the socio-environmental agenda.

Based on the evidence presented, this study proposes that innovation exerts a significant and positive influence on the social and environmental performance of companies listed on the ISE during the period analyzed, thereby reaffirming the importance of innovative strategies in strengthening the triple bottom line.

4 Methodological procedures

This study is descriptive in terms of its objectives, quantitative in terms of its approach, and documentary in terms of its data source (Gil, 2014). The performance values of companies listed on the ISE from 2021 to 2023 were used (Supplementary Data 3, 4, and 5), considering performance by index dimension (B3 S.A., 2024).

Four multiple linear regression models were developed for the analysis to evaluate the influence of sustainability-oriented corporate governance and innovation

on the dimensions of social capital, human capital, environment, and climate change. These models focus on key aspects of corporate sustainability performance as independent variables and the aforementioned dimensions as dependent variables (Supplementary Data 1).

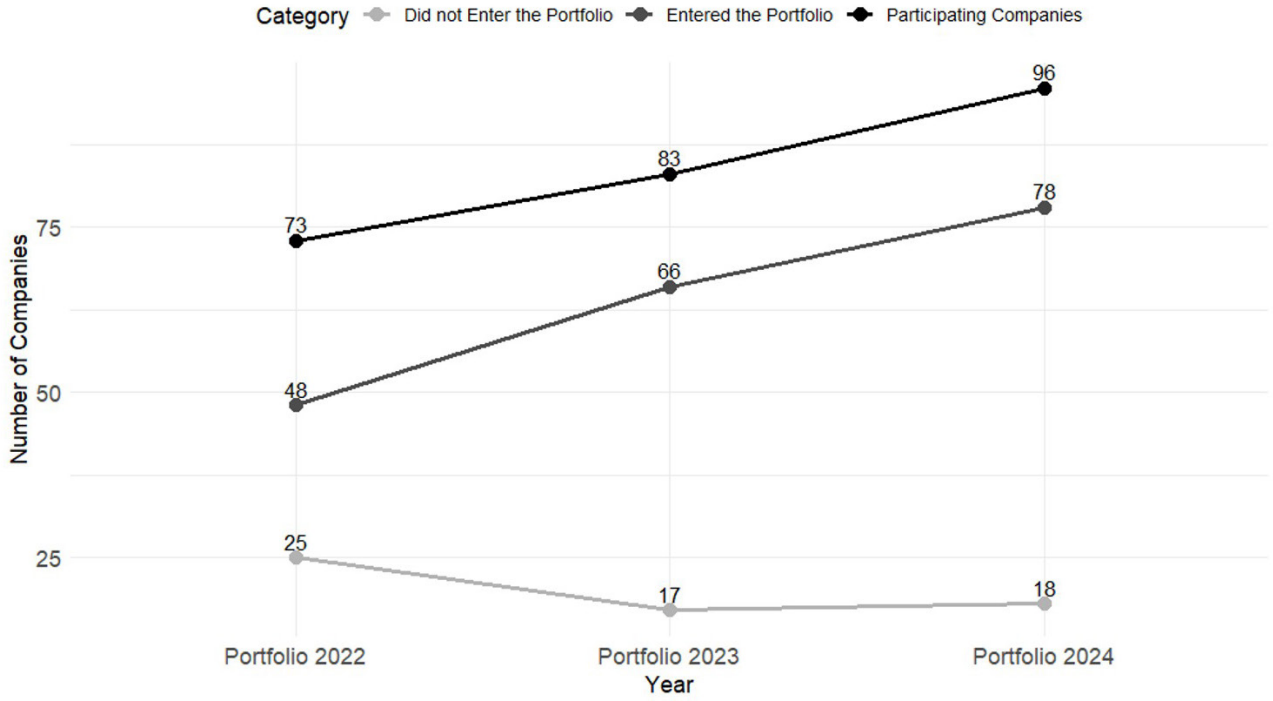
The corporate governance dimension of the ISE focuses on sustainability-related aspects, emphasizing sustainability and risk management, business ethics, the regulatory environment, and governance practices. These practices aim to integrate sustainability into governance strategy and promote diversity on the board of directors. Thus, the ISE presents sustainability criteria as fundamental and central components of governance performance (B3 S.A., 2024).

As the theoretical framework of this study presents, sustainable corporate governance is grounded in the integration of the pillars of sustainability into the core of business strategies (Chen et al., 2021; Naeem et al., 2022; Velte, 2022). This criterion is considered by the ISE when assessing corporate governance performance, particularly given its status as one of the main sustainability indices of the Brazilian stock exchange. Therefore, considering the alignment of the ISE and its dimensions with the sustainability agenda, this study will treat this dimension as sustainable corporate governance. Similarly, the innovation dimension focuses on innovating business models, products, and processes.

The human capital dimension, which is one of the dependent variables, is measured based on labor practices. These practices encompass employee quality of life, occupational health and safety, engagement, diversity, and inclusion. The social capital dimension focuses on human rights, the company's relationship with the communities in which it operates, social investment and corporate citizenship, technical and economic accessibility, and consumer well-being (B3 S.A., 2024).

The environment dimension covers energy management, water and liquid effluent management, hazardous waste and materials, ecological impacts, environmental management policies and practices, and air quality. The climate change dimension is assessed externally by CDP Climate Change, considering disclosure, awareness, management, and leadership within the context of corporate climate strategies for mitigation and adaptation (B3 S.A., 2024).

The analysis included the entire population of participating companies, both included and not included in the portfolio (Supplementary Data 2). Graph 1 shows the number of companies listed on the ISE during the period analyzed.



Graph 1. Participation in the ISE (2021-2023)
Source: Research data (2024)

As shown in Graph 1, participation in the ISE has risen in recent years, reaching a total of 96 participating companies with sustainable performance evaluated in 2023 (Portfolio 2024). Each observation represents a company in a given year, totaling 252 firm-year observations. Although the data allow for a panel structure, traditional multiple regressions were applied due to the absence of temporal variables, such as year dummies or fixed effects.

The ISE is a theoretical portfolio of assets belonging to listed companies. Its main objective is to serve as a key performance indicator in corporate sustainability. It aims to support investor decision-making and guide companies toward transitioning to business models that focus on environmental, social, and corporate governance (ESG) practices (B3 S.A., 2024). Figure 1 shows the technical procedures adopted for processing and analyzing the data.

The initial steps refer to tests for meeting assumptions. (1) The standard error of the regression coefficients was calculated using bootstrapping (2000 resamples, 95% CI) with the parameters package (Lüdecke et al., 2020) in R software (R Core Team, 2023). Bootstrapping is a robust procedure for handling potential deviations from normality of residuals or heteroscedasticity in the regression model (Haukoos & Lewis, 2005). (2) Next, the second step aims to identify significant outliers in the model using Cook's method (maximum threshold = 0.8).

Step (3) involves verifying the existence of multicollinearity between the independent variables by calculating the tolerance index ($1\text{-}R^2$). Step (4) seeks to infer the existence of residual correlation (Durbin-Watson coefficient). Step (5) checks for heteroscedasticity in the model. Finally, in step (6), the multiple regression is conducted and analyzed. The open-source R software was used for data processing (Schmuller, 2019). The results of the study are presented below.

5 Analysis and discussion of results

This section is divided into two stages that present and discuss the results of the four regression models. These models examine the influence of sustainable corporate governance and innovation on the social and environmental performance of companies listed on the ISE.

5.1 Impact of sustainable corporate governance and innovation on social performance

This subsection of the paper presents two regression models that investigate the extent to which sustainable corporate governance and innovation impact social performance. First, the preliminary tests are presented, followed by an analysis and discussion of the results.

5.1.1 *Assumption tests*

First, it is important to note that no critical multicollinearity issues were identified in the model due to the low level of correlation between the independent variables (VIF = 2.17, 95% CI = [1.83, 2.65]). For the human capital dimension, the preliminary tests showed no significant outliers (threshold = 0.8). However, heteroscedasticity was identified in the model ($p < 0.001$). Despite observing non-normality in the

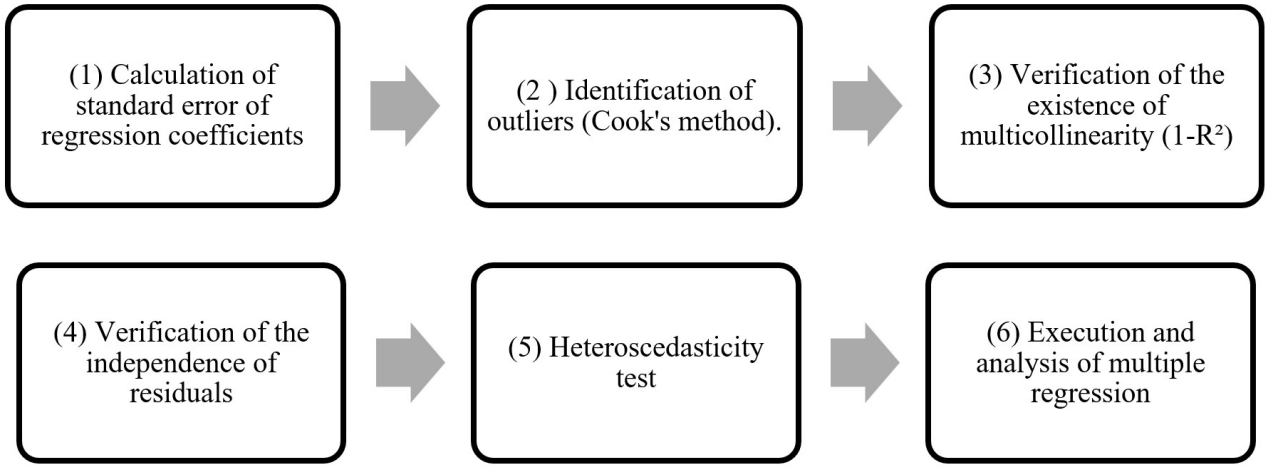


Figure 1. Technical Procedures (Multiple Regressions)
Source: Own elaboration (2024)

residual distribution ($p < 0.001$), the residuals were shown to be independent and uncorrelated ($p = 0.678$), contributing to the suitability of the regression model.

Regarding the social capital dimension, non-normality of residuals was also identified ($p < 0.001$). However, it is noteworthy that, despite this, they did not exhibit autocorrelation ($p = 0.106$). Heteroscedasticity was also detected in this case ($p < 0.001$), indicating non-constant variance of errors across observations. No significant outliers were detected, based on Cook's method (threshold = 0.8), which was applied to the model as a whole. Considering the potential issues identified during data processing in this preliminary phase of the study, the robustness of bootstrapping in addressing deviations in residual normality and heteroscedasticity in the regression model is reiterated, ensuring the reliability of the analysis (Haukoos & Lewis, 2005).

5.1.2 *Results and discussion*

The results of the multiple linear regression analysis (enter method) for the first regression model, in which human capital performance was the dependent variable (DV) and the performance of the sustainable corporate governance and innovation dimensions were the independent variables (IVs), demonstrated a significant influence of sustainable corporate governance and innovation on the human capital performance of the listed companies ($F(2,249) = 168.11$, $p < 0.001$; $R^2_{adjusted} = 0.570$).

Additionally, based on the coefficient of determination (R^2), it is estimated that 57% of the variation in human capital performance can be explained by sustainable corporate governance and innovation. Table 1 presents the coefficients for all predictors.

As evidenced, both independent variables had a significant and positive impact on human capital performance (sustainable corporate governance: $b = 0.6503$, $p < 0.01$; innovation: $b = 0.1365$, $p < 0.01$), particularly governance. The human capital dimension of the ISE, aligned with the social pillar of sustainability, considers criteria related to worker well-being, such as working conditions, legal aspects, management practices, diversity and inclusion, quality of life, and benefits offered (B3 S.A., 2024).

Subsequently, the second regression model demonstrated the highly significant influence of the sustainable corporate governance and innovation dimensions on the social capital dimension ($F(2,249) = 224.22$, $p < 0.001$; $_{adjusted} = 0.640$). The coefficient of determination (R^2) indicated that 64% of the variation in social capital performance can be predicted by governance and innovation among the companies listed on the ISE. Table 2 presents the standardized coefficients of the independent variables.

As demonstrated, both independent variables had a significant and positive impact on social capital performance (sustainable corporate governance: $b = 0.5579$, $p < 0.01$; innovation: $b = 0.2530$, $p < 0.01$), with sustainable corporate governance again standing out as the predictor with the greatest impact. The performance evaluation criteria for the social capital dimension include commitment to human rights, local community engagement, corporate citizenship, and customer well-being, among others (B3 S.A., 2024).

Overall, sustainable corporate governance and innovation have been shown to have a positive and significant impact on the social performance of companies listed on the ISE, with governance standing out in this context. Thus,

Table 1
Predictor Variables of Human Capital Performance (ISE)

Predictors	Standardized Coefficients	T	Sig.
	Beta		
(Constant)	-	0.93	0.353
Sustainable Corp. Governance	0.6503	10.13	0.000
Innovation	0.1365	2.95	0.003

Note: Beta = standardized regression coefficient; T = t-value; Sig. = significance level (p-value).
Source: Research data (2024).

Table 2
Predictor Variables of Social Capital Performance (ISE)

Predictors	Standardized Coefficients	T	Sig.
	Beta		
(Constant)	-	2.81	0.005
Sustainable Corp. Governance	0.5579	9.45	0.000
Innovation	0.2530	5.94	0.000

Note: Beta = standardized regression coefficient; T = t-value; Sig. = significance level (p-value).
Source: Research data (2024).

two hypotheses of this study are confirmed: (H1) sustainable corporate governance positively influences corporate social performance and (H3) corporate innovation positively influences corporate social performance.

The findings of this stage of the study demonstrate the importance of well-structured, sustainable corporate governance practices for the social performance of companies listed on the ISE. The results align with those of the studies cited in the theoretical framework section (Aftab et al., 2022; Doni & Fiameni, 2024; Mititean & Ghigiu, 2024; Peng et al., 2023; Sailesh & Reddy, 2024; Tran, 2023; Zhang et al., 2022), as they positively associate sustainable corporate governance with corporate socio-environmental performance. These results highlight that corporate governance plays a fundamental role in sustainable organizational performance, even in the face of the country's emerging economic context and the multiple political and economic issues characteristic of it.

Furthermore, although innovation performance has a smaller influence on socio-environmental performance than sustainable corporate governance, it still has a positive and significant impact, especially on social capital (beta = 0.2530). Thus, it can be inferred that innovation is a strategy not only for economic efficiency, but also for strengthening social performance, in line with the theoretical framework of this study (Mantikei et al., 2020; Weidner et al., 2021).

Compared to the social capital dimension, sustainable corporate governance had a more substantial impact on the human capital dimension, demonstrating a greater alignment of the independent variables with work quality issues within organizations as opposed to the broader social agenda. This may highlight the emphasis that sustainable corporate governance systems place on workers' quality of life, which is a fundamental issue for companies participating in the ISE and for the pursuit of sustainable development in the context of the Brazilian capital market.

Human capital represents a strategic pillar for the sustainability agenda within organizations. Sustainable corporate governance positively influences issues related to worker participation and improved working conditions, such as employee health, gender equality, decent work, and responsible production and consumption (Amaral et al., 2023; Bai, 2024).

5.2 Impact of sustainable corporate governance and innovation on environmental performance

Like the previous subsection, this one will present two regression models aimed at investigating the extent to which sustainable corporate governance and innovation impact the environmental performance of companies. Preliminary tests and a discussion of the results are presented below.

5.2.1 *Assumption tests*

As mentioned earlier, there are no critical multicollinearity issues in the model (VIF = 2.17, 95% CI = [1.83, 2.65]). Regarding the prediction model for the environment dimension, the normality assumption for the residuals was met (p = 0.360) and no autocorrelation was identified (p = 0.676). Additionally, no significant outliers were found in the data distribution (threshold = 0.8).

As in the previous cases, it was observed that the variance of the residuals is not constant across observations, suggesting the presence of heteroscedasticity (p < 0.001). However, bootstrapping is robust enough to address this issue in the regression model (Haukoos & Lewis, 2005). Regarding the prediction model for the climate change dimension, heteroscedasticity (p < 0.001) and non-normality of the residuals (p < 0.001) were identified. The model showed no residual autocorrelation (p = 0.416), indicating independence of the residuals. No significant outliers were identified in the data distribution. Bootstrapping was used to address the issues of heteroscedasticity and non-normality of the residuals.

5.2.2 *Results and discussion*

The results of the multiple regression model (enter method), with environmental performance as the dependent variable (DV) and innovation performance and sustainable corporate governance performance as the independent variables (IVs), showed a significant influence of sustainable governance and innovation on environmental performance ($F(2,249) = 63.08$, $p < 0.001$; $R^2_{adjusted} = 0330$). Based on the coefficient of determination (R^2), approximately 33% of the variance in environmental performance can be explained by sustainable corporate governance and innovation performance (Table 3).

As in the case of the social alignment dimensions, the independent variables had a significant influence on the environmental performance dimension (sustainable corporate governance: b = 0.5349, p < 0.01; innovation: b = 0.1740, p < 0.05), highlighting the impact of the sustainable corporate governance and innovation dimensions on environmental performance. The environmental dimension of the ISE is aligned with companies' adopted measures to reduce ecological impacts, animal welfare, air quality, water and

liquid effluent management, waste and hazardous materials management, and environmental management policies and practices as a whole (B3 S.A., 2024).

Regarding the last regression model related to climate change performance, a significant influence of sustainable corporate governance and innovation performance was also identified ($F(2,249) = 115.42$, $p < 0.001$; $R^2_{adjusted} = 0.480$), indicating that the performance of the independent variables can predict 48% of the dependent variable performance. Table 4 presents the results.

The performance of the sustainable corporate governance and innovation dimensions demonstrated explanatory power for performance of the climate change dimension (sustainable corporate governance: $b = 1.0188$, $p < 0.01$; innovation: $b = 0.3202$, $p < 0.01$). These findings confirm the remaining hypotheses of this study, indicating that (H2) sustainable corporate governance positively influences environmental performance and that (H4) corporate innovation also positively influences the environmental performance of companies listed on the ISE.

These findings align with previous studies demonstrating the positive influence of sustainable corporate governance and innovation on organizational environmental performance (Benkraiem et al., 2023; Cheng et al., 2024; Choi et al., 2020; McGuire et al., 2012; Li et al., 2020; Liu et al., 2024; Sebastianelli et al., 2025; Walls et al., 2012; Wedari et al., 2023; Vitale et al., 2023; Zhang et al., 2021). Compared to the environmental dimension, this regression model showed a greater impact of the independent variables, indicating that governance and innovation more significantly influence climate change-related practices in the field of environmental performance. This ISE dimension has external evaluation criteria (CDP Disclosure Insight Action).

The climate agenda is currently the main focus of the broader environmental agenda, driven by the urgent need to address climate change and its multifaceted impacts (Centeno, 2020; Efimova et al., 2023). Recent studies have positively associated corporate governance and investments in innovation with measures aimed at neutralizing carbon emissions and disclosing environmental practices focused on the climate agenda (Albitar et al., 2023; Dilling et al., 2024; Keerthana et al., 2024).

The results of this study reinforce the strategic role that both governance and innovation play in the adoption of more effective environmental practices. The emphasis on the climate change dimension reiterates previous findings on the central role of the climate agenda in the current national and international environmental context, where the need to address climate change drives new regulatory and market demands for companies.

The findings of this study generally indicate that sustainable governance and innovation have a positive impact on corporate social and environmental performance. However, in light of the evidence obtained, a fundamental question remains: Why is it important for companies to understand the role of sustainable governance and innovation in improving socio-environmental performance? This understanding is crucial because it can encourage investments in innovation and improvements to governance systems, positively impacting the quality of internal controls and green human capital and improving the company's socio-environmental performance (Feng & Nie, 2024).

Understanding the importance of sustainable corporate governance for social and environmental

Table 3
Predictor Variables of Environmental Performance (ISE)

Predictors	Standardized Coefficients	T	Sig.
	Beta		
(Constant)	-	3.59	0.000
Sustainable Corp. Governance	0.5349	5.59	0.000
Innovation	0.1740	2.52	0.012

Note: Beta = standardized regression coefficient; T = t-value; Sig. = significance level (p-value).
Source: Research data (2024).

Table 4
Predictor Variables of Climate Change Performance (ISE)

Predictors	Standardized Coefficients	T	Sig.
	Beta		
(Constant)	-	-5.44	0,000
Sustainable Corp. Governance	1.0188	7.63	0,000
Innovation	0.3202	3.32	0,001

Note: Beta = standardized regression coefficient; T = t-value; Sig. = significance level (p-value).
Source: Research data (2024).

performance is crucial because strong governance structures have a positive influence on the development and improvement of effective environmental policies, increase social responsibility, and improve corporate image. Sound sustainable governance practices can generate better socio-environmental performance, superior financial results, effective resource allocation, greater stakeholder engagement, and increased market competitiveness, benefiting sustainable development in general (Chen, 2024; Chen et al., 2024; Sun et al., 2024).

Discussions that clarify the importance of innovation for socio-environmental performance can have a positive impact on the value of companies by encouraging them to adopt more efficient and sustainable practices. These discussions should emphasize the effects of innovation in emerging economies (Kong et al., 2023), which is in line with the scope of this research.

Insights that demonstrate the positive influence of sustainable corporate governance and innovation on socio-environmental performance can encourage the acquisition of resources – whether human, technological, or otherwise – that can help organizations transform their business models. This can improve their socio-environmental performance and resilience in dealing with environmental and social challenges effectively (Wei & Zheng, 2024). The final considerations of this study are presented below.

6 Final considerations

The objective of this study was to analyze the impact of innovation and sustainable corporate governance on the socio-environmental performance of companies in the Brazilian capital market. The study focused on companies listed on the ISE from 2021 to 2023. Four multiple linear regression models were used to analyze the data.

The sustainable corporate governance and innovation dimensions were defined as the independent variables (IVs), and the social dimensions (human capital and social capital) and the environmental dimensions (environment and climate change) were defined as the dependent variables (DVs) in the regression models.

The results demonstrated that sustainable corporate governance and innovation have a positive and significant impact on the social and environmental dimensions of the companies in the ISE, aligning with the theoretical framework of this study. The evidence that sustainable corporate governance and innovation practices positively influence socio-environmental performance reinforces the fundamental and strategic role of these variables in organizational sustainability and overcoming environmental and social challenges. These results suggest that companies with stronger governance and innovation structures are better equipped to adopt more advanced corporate social and environmental responsibility practices.

Additionally, sustainable corporate governance and innovation had a greater impact on social dimensions than environmental dimensions of the ISE, which may indicate that companies in the Brazilian capital market pay more attention to governance and business model innovation efforts. Within the environmental pillar, the emphasis was on the impact of corporate governance and innovation on climate-related practices, highlighting the central role of climate change concerns in modern corporate environmental discussions, as evidenced in the literature.

This study contributes to academic and business fields alike. In the theoretical domain, the research reinforces the relationship between sustainable corporate governance, innovation, and socio-environmental performance in the context of Brazil, a country with a vast territory, an emerging economy, and significant social and environmental relevance. By demonstrating that sustainable corporate governance and innovation significantly impact the social and environmental dimensions of companies listed on the ISE, this study contributes to consolidating the literature that links good sustainable governance and innovation practices to organizational sustainability in Brazil and other developing economies.

In practical terms, the findings confirm the initial indications in this study's introduction, offering managers insights to strengthen sustainability in their organizations. Furthermore, the results suggest that sustainable corporate governance and innovation are strategic pillars for companies aiming to enhance their socio-environmental performance. The emphasis on climate-related environmental practices underscores the urgent need for investments and efforts directed toward global warming issues, especially in a global context where climate action initiatives are intensifying. Therefore, this research provides an initial foundation that can help companies and policymakers in the Brazilian capital market improve their sustainability approaches and align their strategies with contemporary socio-environmental challenges.

Regarding the study's gaps and potential pathways for future research agendas, studies are needed to understand the variations in these relationships across different economic sectors, business sizes, and political

scenarios, due to the heterogeneous and dynamic nature of the effects of innovation and sustainable corporate governance on socio-environmental performance. It is important to note that including control variables, such as firm size, could enrich the analysis because these variables may influence the results. However, the study's focus was to evaluate the direct effects of sustainable corporate governance and innovation on corporate socio-environmental performance. Thus, including control variables and using panel data are acknowledged as valuable recommendations for future research.

Additionally, incorporating external variables not covered in the ISE performance analysis could enrich the discussion. These indicators could include indicators of government regulations, changes in consumer preferences, and the interaction between these factors and the effectiveness of sustainable corporate governance and innovation in improving socio-environmental performance.

References

Abedin, S. H., Subha, S., Anwar, M., Kabir, M. N., Tahat, Y. A., & Hossain, M. (2023). Environmental performance and corporate governance: Evidence from Japan. *Sustainability*, *15*(4), 3273. http://doi.org/10.3390/su15043273.

Abid, N., Ceci, F., & Aftab, J. (2024). Attaining sustainable business performance under resource constraints: Insights from an emerging economy. *Sustainable Development*, *32*(3), 2031-2048. http://doi.org/10.1002/sd.2763.

Aftab, J., Veneziani, M., Sarwar, H. & Ishaq, M. I. (2022). Entrepreneurial orientation, entrepreneurial competencies, innovation, and performances in SMEs of Pakistan: Moderating role of social ties. *Business Ethics, the Environment & Responsibility*, *31*, 419-437. http://doi.org/10.1111/beer.12415.

Albitar, K., Al-Shaer, H., & Liu, Y. S. (2023). Corporate commitment to climate change: The effect of eco-innovation and climate governance. *Research Policy*, *52*(2), 104697. http://doi.org/10.1016/j.respol.2022.104697.

Almada, L., Borges, R. S. G., & Ferreira, B. P. (2020). As estratégias da visão baseada em recursos naturais são lucrativas? Um estudo longitudinal do índice de sustentabilidade empresarial brasileiro. *Revista Brasileira de Gestão de Negócios*, *24*(3), 533-555. http://doi.org/10.7819/rbgn.v24i3.4185.

Amaral, M. R., Willerding, I. V. A., & Lapolli, E. M. (2023). ESG and sustainability: The impact of the pillar social. *Concilium*, *23*(13), 186. http://doi.org/10.53660/CLM-1643-23J43.

B3 S.A. (2024). *Índices de sustentabilidade.* https://www.b3.com.br/pt_br/market-data-e-indices/indices/indices-de-sustentabilidade/

Bai, Y. (2024). A study of the impact of human capital investment on organizational performance. *Highlights in Business, Economics and Management*, *32*, 210-216. http://doi.org/10.54097/qd8pxd61.

Baig, M. I., & Yadegaridehkordi, E. (2023). Exploring moderating effects of industry 4.0 adoption on sustainable performance of Malaysian manufacturing organizations. *Journal of Industrial and Production Engineering*, *40*(4), 271-286. http://doi.org/10.1080/21681015.2023.2190766.

Bastos, M. F. L., Rocha, M. K., Aramayo, J. L. S., Maia, M. M. M., & Figueiredo, C. J. J. (2024). Quais atividades econômicas possuem um melhor desempenho sustentável? Uma análise multivariada nas empresas do Índice de Sustentabilidade Empresarial da Bolsa do Brasil. *Administração de Empresas em Revista*, *2*(35), 357-392.

Benkraiem, R., Dubocage, E., Lelong, Y., & Shuwaikh, F. (2023). The effects of environmental performance and green innovation on corporate venture capital. *Ecological Economics*, *210*, 107860. http://doi.org/10.1016/j.ecolecon.2023.107860.

Centeno, E. F. (2020). The socio-political construction of climate change: Looking for paths to sustainability and gender justice. *Sustainability*, *12*(8), 3382. http://doi.org/10.3390/su12083382.

Chen, J. H., Chou, T. S., Wang, J. P., Wei, H. H., & Yang, T. H. (2021). Sustainable corporate governance: The impact factors for top consulting engineering companies in Taiwan. *Sustainability*, *13*(14), 7604. http://doi.org/10.3390/su13147604.

Chen, S. (2024). The relationship among Environmental, Social and Governance (ESG) factors. *Highlights in Business, Economics and Management*, *40*, 881-886. http://doi.org/10.54097/cd714738.

Chen, W., Xie, Y., & He, K. (2024). Environmental, social, and governance performance and corporate innovation

novelty. *International Journal of Innovation Studies*, *8*(2), 109-131. http://doi.org/10.1016/j.ijis.2024.01.003.

Chen, Y., & Jiang, Z. (2024). The impact of enterprise technological innovation on environmental performance: An industry perspective. *Sustainability*, *16*(15), 6457. http://doi.org/10.3390/su16156457.

Cheng, H., Yu, Y., & Zhang, S. (2024). Subsidies, green innovation, and the sustainable performance: Evidence from heavy-polluting enterprises in China. *Journal of Environmental Studies and Sciences*, *14*(1), 102-116. http://doi.org/10.1007/s13412-023-00875-0.

Choi, J. H., Kim, S., & Lee, A. (2020). CEO tenure, corporate social performance, and corporate governance: A Korean study. *Sustainability*, *12*(1), 99. http://doi.org/10.3390/su12010099.

Dilling, P. F. A., Harris, P., & Caykoylu, S. (2024). The impact of corporate characteristics on climate governance disclosure. *Sustainability*, *16*(5), 1962. http://doi.org/10.3390/su16051962.

Doni, F., & Fiameni, M. (2024). Can innovation affect the relationship between Environmental, Social, and Governance issues and financial performance? Empirical evidence from the STOXX200 index. *Business Strategy and the Environment*, *33*(2), 546-574. http://doi.org/10.1002/bse.3500.

Efimova, E. G., Maltsev, A. A., & Chupina, D. A. (2023). Green agenda in the modern practice of countries and regions: In search of a unified approach. *University Journal of Economic Studies*, *39*(1), 55-72. http://doi.org/10.21638/spbu05.2023.103.

Feng, Y., & Nie, C. (2024). Digital technology innovation and corporate environmental, social, and governance performance: Evidence from a sample of listed firms in China. *Corporate Social Responsibility and Environmental Management*, *31*(5), 3836-3854. http://doi.org/10.1002/csr.2781.

Gil, A. C. (2014). *Como elaborar projetos de pesquisa* (6. ed.). São Paulo: Atlas.

Gregory, R. P. (2023). The valuation channel of corporate social responsibility in emerging markets: Evidence from the cost of equity. *Journal of Business Administration Research*, *12*(2), 29. http://doi.org/10.5430/jbar.v12n2p29.

Haukoos, J. S., & Lewis, R. J. (2005). Advanced statistics: Bootstrapping confidence intervals for statistics with "difficult" distributions. *Academic Emergency Medicine*, *12*(4), 360-365. http://doi.org/10.1197/j.aem.2004.11.018. PMid:15805329.

Keerthana, K. B., Wu, S. W., Kokulnathan, T., & Wu, M. E. (2024). The synergistic effect of green innovation and governance in carbon neutrality: Insights from Japanese companies. *Business Strategy and the Environment*, *33*(8), 8055-8066. http://doi.org/10.1002/bse.3922.

Khamisu, M. S., Paluri, R. A., & Sonwaney, V. (2024). Environmental social and governance (ESG) disclosure motives for environmentally sensitive industry: An emerging economy perspective. *Cogent Business & Management*, *11*(1), 2322027. http://doi.org/10.1080/23311975.2024.2322027.

Khan, R. (2016). How frugal innovation promotes social sustainability. *Sustainability*, *8*(10), 1034. http://doi.org/10.3390/su8101034.

Khan, R. U., Saqib, A., Abbasi, M. A., Mikhaylov, A., & Pinter, G. (2023). Green Leadership, environmental knowledge Sharing, and sustainable performance in manufacturing Industry: Application from Upper echelon theory. *Sustainable Energy Technologies and Assessments*, *60*, 103540. http://doi.org/10.1016/j.seta.2023.103540.

Khan, U., & Liu, W. (2023). The role of internal auditing on corporate governance: Its effects of economic and environmental performance. *Environmental Science and Pollution Research International*, *30*(52), 112877-112891. http://doi.org/10.1007/s11356-023-30363-5. PMid:37840078.

Kong, Y. S., Agyemang, A., Alessa, N., & Kongkuah, M. (2023). The moderating role of technological innovation on Environment, Social, and Governance (ESG) performance and firm value: Evidence from developing and least-developed countries. *Sustainability*, *15*(19), 14240. http://doi.org/10.3390/su151914240.

Lavin, J. F., & Montecinos-Pearce, A. A. (2021). ESG disclosure in an emerging market: An empirical analysis of the influence of board characteristics and ownership structure. *Sustainability*, *13*(19), 10498. http://doi.org/10.3390/su131910498.

Li, L., Msaad, H., Sun, H., Tan, M. X., Lu, Y., & Lau, A. K. W. (2020). Green innovation and business sustainability: New evidence from energy intensive industry in China. *International Journal of Environmental Research and Public Health*, *17*(21), 7826. http://doi.org/10.3390/ijerph17217826. PMid:33114610.

Li, M., Tian, Z., Liu, Q., & Lu, Y. (2022). Literature review and research prospect on the drivers and effects of green innovation. *Sustainability*, *14*(16), 9858. http://doi.org/10.3390/su14169858.

Lin, M., Effendi, A. A., & Iqbal, Q. (2022). The mechanism underlying the sustainable performance of transformational leadership: Organizational identification as moderator. *Sustainability*, *14*(23), 15568. http://doi.org/10.3390/su142315568.

Liu, M., Liu, L., & Feng, A. (2024). The impact of green innovation on corporate performance: An analysis based on substantive and strategic green innovations. *Sustainability*, *16*(6), 2588. http://doi.org/10.3390/su16062588.

Lüdecke, D., Ben-Shachar, M., Patil, I., & Makowski, D. (2020). Extracting, computing and exploring the parameters of statistical models using R. *Journal of Open Source Software*, *5*(53), 2445. http://doi.org/10.21105/joss.02445.

Ma, Y., Rahim, N. S. B. A., Panatik, S. A. B., & Li, R. (2024). Corporate governance, technological innovation, and corporate performance: Evidence from China. *Heliyon*, *10*(11), e31459. http://doi.org/10.1016/j.heliyon.2024.e31459. PMid:38828300.

Machado, R. H., Muñoz-Villamizar, A., & Santos, J. (2024). Roadmap to enhance operational excellence in emerging countries. *Heliyon*, *10*(10), e30852. http://doi.org/10.1016/j.heliyon.2024.e30852. PMid:38813224.

Mantikei, B., Christa, U. R., Sintani, L., Negara, D. J., & Meitiana, M. (2020). The role of responsible leadership in determining the triple-bottom-line performance of the Indonesian tourist industry. *Contemporary Economics*, *14*(4), 463-473. http://doi.org/10.5709/ce.1897-9254.418.

Mazzioni, S., Soschinski, C. K., Leite, M., Magro, C. B., & Sanches, S. L. R. (2024). ESG performance in emerging economies. *Macro Management & Public Policies*, *6*(1), 21-35. http://doi.org/10.30564/mmpp.v6i1.6202.

McGuire, J., Dow, S., & Ibrahim, B. (2012). All in the family? Social performance and corporate governance in the family firm. *Journal of Business Research*, *65*(11), 1643-1650. http://doi.org/10.1016/j.jbusres.2011.10.024.

Mejía, D. A. C., García-Benau, M. A., & Correa-García, J. A. (2024). The critical role of corporate governance in sustainable development goals prioritisation: A 5 P s-based analysis for emerging economies. *Heliyon*, *10*(3), e25480. http://doi.org/10.1016/j.heliyon.2024.e25480. PMid:38333807.

Mititean, P., & Ghigiu, M. A. (2024). Understanding the role of corporate governance in driving sustainability in Europe. *CECCAR Business Review*, *5*(3), 62-73. http://doi.org/10.37945/cbr.2024.03.07.

Mongelli, L., & Rullani, F. (2017). Inequality and marginalisation: Social innovation, social entrepreneurship and business model innovation. *Industry and Innovation*, *24*(5), 446-467. http://doi.org/10.1080/13662716.2017.1295365.

Naeem, M. A., Karim, S., Nor, S. M., & Ismail, R. (2022). Sustainable corporate governance and gender diversity on corporate boards: Evidence from COVID-19. *Ekonomska Istrazivanja*, *35*(1), 5824-5842. http://doi.org/10.1080/1331677X.2022.2038649.

Oliveira, J. C. (2024). Corporate governance mechanisms and financial performance: An analysis of listed companies in Brazil. *International Journal of Strategic Management*, *3*(1), 53-67. http://doi.org/10.47604/ijsm.2483.

Peng, X., Li, J., Zhang, H., & Nakandala, D. (2023). Internationalization and multinational corporations' environmental performance: The role of corporate Governance. *Environmental Research Letters*, *18*(9), 094057. http://doi.org/10.1088/1748-9326/acf6d7.

R Core Team. (2023). *R: A language and environment for statistical computing*. Vienna: R Foundation for Statistical Computing.

Rehman, S. U., Bhatti, A., Kraus, S., & Ferreira, J. J. M. (2021). The role of environmental management control systems for ecological sustainability and sustainable performance. *Management Decision*, *59*(9), 2217-2237. http://doi.org/10.1108/MD-06-2020-0800.

Ruggiero, P., & Cupertino, S. (2018). CSR strategic approach, financial resources and corporate social performance: The mediating effect of innovation. *Sustainability*, *10*(10), 3611. http://doi.org/10.3390/su10103611.

Sailesh, B., & Reddy, K. (2024). Analyzing the impact of environmental strategies on corporate governance and long-term performance. *Journal of Tourism Theory and Research*, *10*(1), 32-38. http://doi.org/10.24288/jttr.1446263.

Schmuller, J. (2019). *Análise estatística com R* (2. ed.). Rio de Janeiro: Alta Books.

Sebastianelli, R., Tamimi, N., Isil, O., & Rocco, V. (2025). Insights from analyzing corporate environmental and social disclosure. *Management Decision*, *63*(3), 803-823. http://doi.org/10.1108/MD-10-2023-1767.

Siaw, O. L., Xuhua, H., Owusu, E., Owusu-Agyeman, A., Fulgence, B. E., & Frimpong, S. A. (2022). Eco-innovation, sustainable business performance and market turbulence moderation in emerging economies. *Technology in Society*, *68*, 101899. http://doi.org/10.1016/j.techsoc.2022.101899.

Silva, V. M., & Lucena, W. G. L. (2019). Contabilidade ambiental: Análise da participação no índice de sustentabilidade empresarial (ISE) e a rentabilidade das empresas listadas na [B]3. *Revista Gestão & Tecnologia*, *19*(2), 109-125. http://doi.org/10.20397/2177-6652/2019.v19i2.1563.

Sun, H. B., Bai, T., Fan, Y. Q., & Liu, Z. (2024). Environmental, social, and governance performance and enterprise sustainable green innovation: Evidence from China. *Corporate Social Responsibility and Environmental Management*, *31*(4), 3633-3650. http://doi.org/10.1002/csr.2761.

Tan, L. (2024). Improving corporate performance through stakeholder-based ESG practices. *Journal of Education, Humanities and Social Sciences*, *30*, 6. http://doi.org/10.54097/jts5nw21.

Tran, N. H. (2023). Impact factors on the adoption of corporate social responsibility: Empirical evidence from an emerging market. *Corporate Governance and Organizational Behavior Review*, *7*(2), 350-359. http://doi.org/10.22495/cgobrv7i2sip13.

Velte, P. (2022). Does sustainable corporate governance have an impact on materiality disclosure quality in integrated reporting? International evidence. *Sustainable Development*, *30*(6), 1655-1670. http://doi.org/10.1002/sd.2333.

Vitale, G., Cupertino, S., & Taticchi, P. (2023). Analysing the role of available organisational slack resources in affecting environmental performance. A structural equation modelling approach. *Measuring Business Excellence*, *27*(3), 341-363. http://doi.org/10.1108/MBE-09-2022-0110.

Wahidahwati, W., & Ardini, L. (2021). Corporate Governance and Environmental Performance: How They Affect Firm Value. *Journal of Asian Finance. Economics and Business*, *8*(2), 953-962. http://doi.org/10.13106/jafeb.2021.vol8.no2.0953.

Walls, J. L., Berrone, P., & Phan, P. H. (2012). Corporate governance and environmental performance: Is there really a link? *Strategic Management Journal*, *33*(8), 885-913. http://doi.org/10.1002/smj.1952.

Wedari, L. K., Moradi-Motlagh, A., & Jubb, C. (2023). The moderating effect of innovation on the relationship between environmental and financial performance: Evidence from high emitters in Australia. *Business Strategy and the Environment*, *32*(1), 654-672. http://doi.org/10.1002/bse.3167.

Wei, J. S., & Zheng, Q. (2024). Environmental, social and governance performance: Dynamic capabilities through digital transformation. *Management Decision*, *62*(12), 4021-4049. http://doi.org/10.1108/MD-10-2023-2028.

Weidner, K., Nakata, C., & Zhu, Z. (2021). Sustainable innovation and the triple bottom-line: A market-based capabilities and stakeholder perspective. *Journal of Marketing Theory and Practice*, *29*(2), 141-161. http://doi.org/10.1080/10696679.2020.1798253.

Zhang, M., Zeng, W., Tse, Y. K., Wang, Y., & Smart, P. (2021). Examining the antecedents and consequences of green product innovation. *Industrial Marketing Management*, *93*, 413-427. http://doi.org/10.1016/j.indmarman.2020.03.028.

Zhang, Z., Zhu, H., Zhou, Z., & Zou, K. (2022). How does innovation matter for sustainable performance? Evidence from small and medium-sized enterprises. *Journal of Business Research*, *153*, 251-265. http://doi.org/10.1016/j.jbusres.2022.08.034.

SUPPLEMENTARY MATERIAL

Supplementary material accompanies this paper.
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Supplementary Data 2 – R script
Supplementary Data 3 – ISE 2021
Supplementary Data 4 – ISE 2022
Supplementary Data 5 – ISE 2023
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