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WHAT DRIVES ESG PERFORMANCE? THE ROLE OF INSTITUTIONAL QUALITY

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WHAT DRIVES ESG PERFORMANCE? THE ROLE OF INSTITUTIONAL QUALITY

1 INTRODUCTION

In recent years, ESG performance has begun to emerge in studies of corporate sustainability. ESG performance focuses on stakeholder-oriented management, that is, the social and environmental information disclosed by companies is of interest not only to shareholders, but also to consumers, clients, communities, media, the State, among other interested parties (Abdi et al., 2022). From this perspective, ESG performance breaks with conventional shareholder-oriented management, since today there is greater institutional pressure for organizations to contribute to sustainable development and social well-being (Ortas et al., 2019).

Given the interest in ESG performance, several studies have tried to find which factors can determine the companies' engagement in ESG (Abdi et al., 2022; Huang, 2021; Wong et al., 2021). Although these studies conclude that financial performance affects ESG performance, it is still unclear how institutional quality influences ESG performance. According to Al-Mamun and Seamer (2022), institutional quality are external forces, driven by the country, which favor companies to adopt greater social responsibility, as a rule of law, economic and financial development, human capital formation and exposure to international trade.

El Khoury et al. (2021) have suggested that future studies can examine how the institutional environment affects ESG performance in emerging economies as well, as there is a concentration of studies in developed countries. According to Latapí Agudelo et al. (2020), it is still unclear how national forces affect ESG performance in the energy sector. According to Lee (2021), energy companies work directly with natural resources and therefore need to respond adequately to regulation, social expectations, and international agreements. Although the energy sector is considered environmentally sensitive due to its impact on the environment, most previous studies on ESG performance have not been carried out in the energy sector (Lee, 2021).

Additionally, the literature review by Latapí Agudelo et al. (2020) showed that most studies on ESG performance are focused on the study of European and Asian countries, as well as most of these studies use Stakeholder Theory as a theoretical lens. As different studies measure ESG performance by different metrics, it is not possible to compare these researches. Therefore, Daugaard and Ding (2022) call for new studies to use a unified metric to measure ESG in different institutional contexts.

Therefore, to fill these gaps that still exist in the literature, our study aims to investigate the role of the country's institutional quality on the ESG performance of its companies. To that end, our research analyzed the ESG performance of 412 companies based in 19 countries over four years (2016-2019). Our dependent variable is ESG performance, and the independent variables are rule of law, economic freedom, education index and freedom to trade internationally. In our study, these variables represent the institutional quality of countries.

Our findings demonstrate that institutional quality has a significant influence on ESG performance. In fact, when companies are operating in countries with greater economic freedom and with greater freedom to trade internationally, they engage more in ESG practices. These results contribute to the literature on three major ways. First, we confirm the main thesis of Institutional Theory, which argues that organizational behavior is determined by the

institutional context of the country. In addition, we expanded the debate and addressed the lack of studies that relate ESG performance and institutional quality in the energy sector.

Second, our study has managerial implications. Managers should be aware that different institutional characteristics will encourage funding for ESG practices. Therefore, it is not just internal factors of companies that determine their ESG result. Third, our findings are useful for governments as they can improve their institutional quality if they want their companies to have better ESG performance. For example, by increasing the economic freedom of their markets, governments encourage companies to have more ESG practices, because there are a greater number of stakeholders pressing their corporate performance.

We organize the rest of the paper as follows: The second section introduces the theoretical foundation together with the research hypotheses. The third section details the research design. The results are presented and discussed in section 4 and finally, section 6 concludes the paper.

2 THEORETICAL BACKGROUND

Institutional Theory (IT) appears with the seminal studies of DiMaggio and Powell, (1983), Meyer and Rowan (1977) and Zucker (1987) and until today it is considered one of the main theories applied to organizational studies. This theory offers a complementary approach to Legitimacy Theory, as it attempts to explain how organizations perceive and respond to social change and institutional pressures (Bouilloud et al., 2020). Therefore, IT focuses on the analysis of factors external to firms and how these factors influence organizational behavior. In this way, organizations are seen as an open system, in which their characteristics are influenced by national institutions.

In this sense, national institutions are an important concept developed by IT. According to North (1991), institutions are the rules of the game that govern social exchanges between people and organizations. In turn, Scott (2008) defines institutions as regulatory, normative, and cultural-cognitive elements that provide stability to social life. By relating these concepts, we realize that institutions are macroeconomic elements that shape the relationship between companies and their stakeholders. Thus, institutional differences between countries can result in different organizational configurations.

DiMaggio and Powell (1983) defined these institutional differences as pressures that institutions exert on companies. According to these authors, coercive, normative, and mimetic forces pressure organizations to act in a similar way, so that they can survive in the environment. IT shows us that the organization's failure to adapt to these national forces could result in legal and social penalties. Therefore, within a national system, companies adapt to national institutions to obtain legitimacy for their corporate actions.

Based on IT, the characteristics of the country's institutional environment affect not only the financial performance of organizations, but also their social and environmental behavior. A substantial number of papers use IT to explain how the institutional environment influences the environmental behavior of companies. To measure this institutional environment, different approaches have been used: institutional pressures presented by DiMaggio and Powell (1983); cultural system of countries developed by Hofstede (1983); institutional pillars defined by Scott (1995); Variety of Capitalism approach by Hall and Soskice (2001) and national business system by Whitley (2003).

Some empirical studies have found that, in general, there is a positive effect of the institutional environment on the ESG performance of companies (Baldini et al., 2018; El

Khoury et al., 2021; Ortas et al., 2019). Despite this, it is still unclear how certain features of the national environment can promote or constrain ESG performance. For example, the study by Coluccia et al. (2018) showed that a better regulatory system does not impact ESG performance. However, Ortas et al. (2019) found that in countries with better environmental regulation, organizations use ESG performance to align legislation and to meet stakeholder needs. Although the study by Ioannou and Serafeim (2012) finds that in countries with better education systems, companies do more for ESG performance, Rosati amd Faria (2019) did not find a significant impact of greater availability of intellectual capital in the country and greater ESG performance.

More recently, the study by Al-Mamun and Seamer (2022) propose that institutional quality determines the ESG performance of companies. These authors state that institutional quality can be measured through four elements: rule of law, economic financial development, human capital formation and exposure to international trade. Based on the work of Al-Mamun and Seamer (2022), we selected four variables to compose what the authors define as institutional quality. Figure 1 presents our conceptual model.

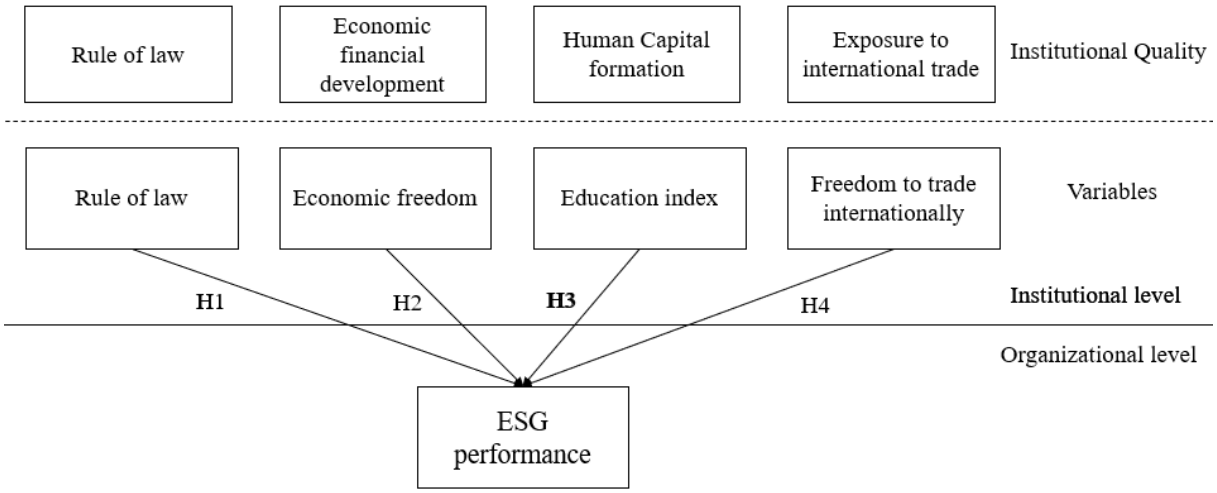

Figure 1. Conceptual model.

As can be seen, for each pillar of institutional quality, we selected a corresponding variable. Thus, we developed four research hypotheses, which will be defended below.

2.1 Hypotheses Development

2.1.1 Rule of law

Rule of law indicates the level of effective stakeholder protection and the degree to which people trust the country's institutions (Forgione et al., 2020). Coluccia *et al.* (2018) state that in countries with better rule of law, governments are transparent and create conditions to encourage business ethics. Confirming this finding, the study by Pinheiro et al. (2022) show that companies are a mirror of the institutional environment in which they operate, that is, in countries where people trust national institutions more, companies have better ESG performance. A better institutional environment encourages companies to adopt ESG practices, because stakeholders put greater pressure on companies (El Khoury et al., 2021). Different global studies (Dau et al., 2021; Hamed et al., 2022; Miniaoui et al., 2019) have also found that

countries with better regulatory quality, companies engage more in ESG issues. Therefore, we argue that:

H1: In countries with greater rule of law, companies have better ESG performance.

2.1.2 Economic financial development

According to Rosati and Faria (2019), in more open markets, that is, with greater economic freedom, companies seek innovation more frequently, since there are fewer limitations to the behavior of economic actors. Additionally, in freer markets, competition between industries is greater, which generates companies' interest in environmental differentiation and transparency (Graafland, 2019; Graafland & Noorderhaven, 2020). Some previous studies (Cai et al., 2019; Hartmann & Uhlenbruck, 2015) have found a positive impact of economic freedom on the social and environmental disclosure of companies. According to the findings of these studies, companies are more likely to behave ethically in countries with greater economic freedom, since in economies that leave the market more open, companies have a better relationship with their stakeholders, which facilitates implementation of ESG practices. Therefore, we argue that:

H2: In countries with greater economic freedom, companies have better ESG performance.

2.1.3 Human capital formation

In countries with better education, companies have the availability of qualified human capital, which, in general, brings environmental issues into the organization (Ortas et al., 2019). Ioannou and Serafeim (2012) hypothesized that the country's education system has a positive impact on ESG performance. These authors believe that in countries where people have greater access to information, they are more likely to involve environmental issues in their purchasing decision-making process and to value companies with greater social reputation (Baldini et al., 2018). Additionally, previous studies (Barkemeyer et al., 2019; Ortas et al., 2019) conclude that where the availability of intellectual capital is greater, stakeholders are more likely to pressure companies for greater ESG performance. Therefore, we argue that:

H3: In more educated countries, companies have better ESG performance.

2.1.4 Exposure to international trade

Globalization and increased international integration have expanded trade between countries, which has favored the opening of markets (Tashman et al., 2019). In countries with more open markets, companies tend to have more stakeholders, such as foreign customers, governments, and the media from other countries (Newman et al., 2018). Furthermore, companies that trade in the international market follow the environmental regulation not only of their country of origin but are subject to local institutional pressures as well. Graafland (2019) states that in countries with greater exposure to international trade, firms have less government regulation and that they replace the lack of regulation with greater ESG performance (Acabado et al., 2020; Jackson & Apostolakou, 2010). Therefore, we argue that:

H4: In countries with greater freedom to trade internationally, companies have better ESG performance.

3 METHODS

Our population corresponds to all companies in the energy sector of the G20 countries (organization composed of the 19 most developed countries in the world plus the European Union). To select our sample, we filtered only those companies in the energy industry that had ESG, financial and governance information in the Refinitiv Eikon database (formerly called Thomson Reuters Eikon).

Our study has a sample of 412 companies based in the 19 countries that make up the G20 and analyzes 4 years: from 2016 to 2019. This period was chosen because according to Orzes et al. (2020), after signing the UN Global Compact, companies increased interest in ESG issues. We did not select the years 2020 and 2021, as they are years of the Covid-19 pandemic, and this could interfere with the results. Table 1 presents the sample.

Table 1. Number of companies by country.

Country	Nº of companies	Percentage	Nº of observations by company
Argentina	4	0.97	52
Australia	25	6.07	325
Brazil	7	1.70	91
Canada	65	15.78	845
China	33	8.01	429
France	10	2.43	130
Germany	8	1.94	104
India	9	2.18	117
Indonesia	6	1.46	78
Italy	5	1.21	65
Japan	7	1.70	91
Korea	6	1.46	78
Mexico	2	0.49	26
Russia	10	2.43	130
Saudi Arabia	2	0.49	26
South Africa	2	0.49	26
Turkey	3	0.73	39
The United Kingdom	24	5.83	312
The United States	184	44.66	2392
Total	412	100.00	5356

As can be seen, the 412 international companies in the final sample are based in 19 countries and represent a total of 5356 observations. The country with the largest representation is the United States with 184 companies, which corresponds to 44.66% of the total. Next, Canada and China have the largest representations with 65 and 33 companies, respectively. On the other hand, Mexico, Saudi Arabia, and South Africa have only 2 companies, which means the smallest representation in our sample. These three countries do not even represent 2% of the sample.

The dependent variable is ESG performance, which according to Ortas et al. (2019), it is a multidimensional construct composed of social and environmental results of companies related to different stakeholders. This variable is continuous and ranges from 0 (companies with the lowest ESG Performance) to 100 (companies with the highest ESG Performance). We

divided this variable into the environmental, social and governance pillars. A score ranging from 0 to 100 is also assigned to each of these pillars. Table 2 provides the variables, metrics, and collection sources.

Table 2. Variable definitions, measurements, and data sources.

Variables	Definition	Source
ESG	ESG Performance: continuous variable ranging from 0 (lowest corporate ESG performance) to 100 (highest corporate ESG performance).	Refinitiv Eikon database
ENVIR	Environmental performance: continuous variable that varies from 0 (lowest environmental performance) to 100 (highest environmental performance).	Refinitiv Eikon database
SOCIA	Social performance: continuous variable that varies from 0 (lowest social performance) to 100 (highest social performance).	Refinitiv Eikon database
GOVER	Governance performance: continuous variable that ranges from 0 (lowest governance performance) to 100 (higher governance performance).	Refinitiv Eikon database
RULLAW	Rule of law: continuous variable that captures the degree to which agents trust and comply with society's rules, ranging from -2.5 (lowest trust in society's rules) to +2.5 (highest trust).	Worldwide Governance Indicators, World Bank
ECOFRE	Economic Freedom: continuous variable that captures government size, regulatory efficiency, and market openness, ranging from 0 (least freedom) to 100 (most freedom).	Heritage Foundation
EDUIND	Education index: continuous variable that measures the average years of schooling (adults) and expected years of schooling (children), ranging from 11.90 (lowest educational level) to 23.10 (highest educational level).	United Nations Development Programme
TRAINT	Freedom to trade internationally: continuous variable that measures the ease of companies to export their products to other countries, ranging from 3.99 (least freedom to trade) to 10 (greater freedom).	Fraser Institute
MARKCAP	Market Capitalization: refers to the total dollar market value of a company's outstanding shares.	Refinitiv Eikon database
ROE	Return on Equity: It is the ratio of net income to equity.	Refinitiv Eikon database
FIRMSIZE	Firm Size: Natural logarithm of companies' total assets.	Refinitiv Eikon database
LEVERAGE	Leverage: firms' long-term debt divided by common equity.	Refinitiv Eikon database
BOARDSIZE	Board size: Number of directors on board.	Refinitiv Eikon database
BOARDIND	Board independence: Total number of independent directors on boards/total number of directors on boards.	Refinitiv Eikon database
BOARDIVER	Board diversity: Percentage of women on the board of directors.	Refinitiv Eikon database
CSRCOM	Corporate Social Responsibility Committee: Dummy variable: 1 = if the company has a CSR committee, and 0 = otherwise.	Refinitiv Eikon database
UNSIGN	UN Global Compact Signatory: Dummy variable: 1 = if the company is a signatory of the UN Global Compact, and 0 = otherwise.	Refinitiv Eikon database

The independent variables represent the institutional quality of the countries. According to Al-Mamun and Seamer (2022), institutional quality can be measured by four country characteristics: rule of law, economic and financial development, human capital formation and exposure to international trade. For each of these characteristics, we select variables to represent them. Rule of law, economic freedom, education index and freedom to trade internationally are continuous variables and were collected from reports by international bodies such as the World Bank, Heritage Foundation, United Nations Development Program and Fraser Institute.

In econometric models, we control the impact of institutional quality on ESG performance through financial and governance variables, which avoids bias in the estimations. These variables were selected because they have been conventionally associated with the companies' ESG level. The financial control variables are market capitalization, retorn on equity, firm size, and leverage. The governance control variables are board size, board independence, board diversity, CSR committee, and UN Global Compact Signatory.

To test our hypotheses, we run the following econometric models:

$$ESG_{it} = \beta_{it} + \beta_1 RULLAW_{it} + ECOFRE_{it} + EDUIND_{it} + TRAINT_{it} + MARKCAP_{it} + ROE_{it} + FIRMSIZE_{it} + LEVERAGE_{it} + BOARDSIZE_{it} + BOARDIND_{it} + BOARDIVER_{it} + CSRCOM_{it} + UNSIGN_{it} + \theta_i + \varepsilon_{it} \quad \text{Model I}$$

$$ENVIR_{it} = \beta_{it} + \beta_1 RULLAW_{it} + ECOFRE_{it} + EDUIND_{it} + TRAINT_{it} + MARKCAP_{it} + ROE_{it} + FIRMSIZE_{it} + LEVERAGE_{it} + BOARDSIZE_{it} + BOARDIND_{it} + BOARDIVER_{it} + CSRCOM_{it} + UNSIGN_{it} + \theta_i + \varepsilon_{it} \quad \text{Model II}$$

$$SOCIA_{it} = \beta_{it} + \beta_1 RULLAW_{it} + ECOFRE_{it} + EDUIND_{it} + TRAINT_{it} + MARKCAP_{it} + ROE_{it} + FIRMSIZE_{it} + LEVERAGE_{it} + BOARDSIZE_{it} + BOARDIND_{it} + BOARDIVER_{it} + CSRCOM_{it} + UNSIGN_{it} + \theta_i + \varepsilon_{it} \quad \text{Model III}$$

$$GOVER_{it} = \beta_{it} + \beta_1 RULLAW_{it} + ECOFRE_{it} + EDUIND_{it} + TRAINT_{it} + MARKCAP_{it} + ROE_{it} + FIRMSIZE_{it} + LEVERAGE_{it} + BOARDSIZE_{it} + BOARDIND_{it} + BOARDIVER_{it} + CSRCOM_{it} + UNSIGN_{it} + \theta_i + \varepsilon_{it} \quad \text{Model IV}$$

Where the subscript “i” refers to the company, “t” represents the time, ß is the estimated parameter, θ refers to the unobservable time-invariant, company-specific effects and ε represents the error. Models are estimated using panel data regression with fixed and random effects. To choose these effects, the Hausman test was used. To validate and increase the level of confidence in our findings, we operationalized tests to measure the multicollinearity, heteroscedasticity, and endogeneity of the data. Multicollinearity was tested by Variance Inflation Factor (VIF). VIF below 10 represents absence of multicollinearity. To test for heteroscedasticity, the Breusch-Pagan test. Endogeneity problems are controlled using the Durbin-Wu Hausman test.

4 RESULTS AND DISCUSSION

4.1 Descriptive Statistics

Table 3 summarizes the descriptive statistics of all the variables analyzed. The dependent variable (ESG performance) has a mean of 41.43. Regarding the independent variables, the rule of law has an average of 1.25, demonstrating greater confidence in society's

rules. Economic freedom has an average of 72.35, which represents being closer to the factor of greater freedom, while the education index has an average of 16.35 and reveals that, in general, the companies in the sample are based in countries with greater schooling. Finally, freedom of international trade has an average of 7.70, which represents greater ease for companies to market their products to other countries.

Table 3. Descriptive Analysis.

Variable	Obs.	Mean	Std. Dev.	Min	Max
ESG	1437	41,439	21,274	0.31	91.48
ENVIR	1437	35,265	27,169	0.00	96.28
SOCIA	1437	41,417	24,213	0.66	94.97
GOVER	1437	50,377	23,664	0.16	98.56
RULLAW	1437	1,254	0.763	-0.79	1.84
ECOFRE	1437	72,359	8,407	43.8	81.00
EDUIND	1437	16,351	1,939	11.9	23.10
TRAINT	1437	7,702	0.612	5.20	8.77
MARKCAP	1437	9,162	0.912	5.61	12.28
ROE	1437	0.024	0.737	-20.09	2.64
FIRMSIZE	1437	9,490	0.869	6.54	11.76
LEVERAGE	1437	0.763	2,152	-1.51	31.4
BOARDSIZE	1437	8,721	2,758	1.00	22.0
BOARDIND	1437	65,089	22,974	0.00	100
BOARDIVER	1437	15,237	12,446	0.00	62.5
CSRCOM	1437	0.582	0.493	0.00	1.00
UNSIGN	1437	0.128	0.335	0.00	1.00

Furthermore, the market capitalization has an average of 9.16, the return on equity is 0.02 on average, the company's total assets represent 9.49 of the average, with an average of 0.76, there is leverage, the board size has an average of 8.72, board independence has an average of 65.08. The percentage of women on the board of directors has an average of 15.23%, indicating that, in general, the companies in the sample have little female representation on the boards. The corporate social responsibility committee shows an average of 0.58, indicating that most companies have a sustainability committee. Finally, the adoption of the UN Global Compact has an average of 0.12, which reveals that most companies in the sample have not signed this global agreement.

4.2 Multivariate Analysis and discussion

Table 4 presents the findings for the four models built to measure the impacts of independent variables on ESG performance and their variations (environmental dimension, social dimension, and corporate governance dimension).

Table 4. Multivariate Analysis Results.

	Model I - ESG	Model II - E	Model III - S	Model IV - G
Variable	Coef. (sig)	Coef. (sig)	Coef. (sig)	Coef. (sig)
RULLAW	-11.581***	-7.479 (0.002)	-9.731***	-19.57***
ECOFRE	0.371**	0.313 (0.186)	0.302 (0.198)	0.618***
EDUIND	-0.216 (0.490)	-1.074 (0.210)	-.344 (0.403)	0.995**

TRAINT	6.764***	5.278***	7.726***	7.671***
MARKCAP	2.542**	5.522***	7.131***	-6.494***
ROE	-0.864 (0.557)	-1.741 (0.371)	-0.383 (0.843)	-0.041 (0.984)
FIRMSIZE	5.344***	8.240***	-0.634 (0.729)	8.780***
LEVERAGE	0.113 (0.581)	0.354 (0.191)	0.064 (0.812)	-0.069 (0.809)
BOARDSIZE	0.177 (0.372)	0.147 (0.575)	-0.059 (0.821)	0.505**
BOARDIND	0.059***	-0.112***	-0.032 (0.320)	0.416***
BOARDIVER	0.324***	0.314***	0.254***	0.426***
CSRCOM	15.067***	15.62***	18.29***	10.42***
UNSIGN	10.732***	11.72***	15.45***	1.801 (0.350)
_CONS	-113.3***	-139.1***	-94.37***	-112.3***
Obs.	954	954	954	954
R^2	0.5729	0.5455	0.4545	0.3565
VIF	3.68	3.68	3.68	3.68
Breusch-Pagan test	0.326**	0.592***	0.2759***	0.0261***
Durbin-Watson test	No endogenous	No endogenous	No endogenous	No endogenous
Wald x^2 test	1274.48	1142.23	797.47	518.96
Hausman test	Fixed effects	Fixed effects	Fixed effects	Fixed effects

***p<0.01. **p<0.05. *p<0.10.

Initially, regarding the results found on the independent variables, the rule of law has a negative effect on the dependent variable, which differs from hypothesis 1. This hypothesis proposes that in countries with greater rule of law, companies have better ESG performance. The findings suggest that the more agents trust society's rules, the less they show engagement with environmental, social and governance performance.

The finding for hypothesis 1 contradicts the study by Pinheiro et al. (2022). Despite this, we can suggest that in countries where people rely more on the rule of society, companies have lower ESG performance, since they do not need to disclose this information in a formal report, for example. In these countries, society can rely more on the performance of companies and expect them to act responsibly, independent of a formal environmental report.

Findings related to economic freedom corroborate hypothesis 2, that is, in countries with greater economic freedom, companies have better ESG performance. As can be seen, the data reveal that greater economic freedom in the country positively influences governance performance. This result is in line with previous findings (Cai et al., 2019; Hartmann & Uhlenbruck, 2015). In countries with greater economic freedom, there is greater support and ease for the development of new businesses, generating greater competition. ESG performance in these contexts can serve as a competitive advantage, that is, the company not only delivers a quality product but also behaves responsibly.

Given the competition, in more economically liberal countries, stakeholders are expected to put more pressure on organizations for responsible behavior, which drives them towards better ESG performance. According to Jackson and Apostolakou (2010), companies based in liberal market economies tend to have more voluntary disclosure of environmental and social issues to replace the lack of government regulation.

The level of schooling has a significant and positive effect by revealing that the higher level of schooling provides a higher level of governance. Thus, in countries with better education, companies have better corporate governance. The study by Ortas et al. (2019) is in

line with this result. However, the education metric does not have a significant effect on ESG performance, partially refuting hypothesis 3, which assumes that in more educated countries, companies have better ESG performance.

When a country has greater availability of intellectual capital, its companies are more likely to have better corporate governance, as people in the country are expected to have more access to education to efficiently manage organizations. Extending the work of Ioannou and Serafeim (2012), we can infer that in more educated countries, people have more access to information and are more aware of the responsible role of companies. Given this scenario, companies direct efforts to additional issues (ESG performance), in addition to traditional financial aspects.

As for hypothesis 4, which states that in countries with greater freedom to trade internationally, companies have better ESG performance, this is confirmed. The findings show that greater ease of trading internationally enables companies to have greater environmental, social, and corporate governance performance. Our findings are in line with previous studies (Acabado et al., 2020; Hartmann & Uhlenbruck, 2015).

In markets with greater ease of trade, there is greater competitiveness in the private market (Graafland & Noorderhaven, 2020). This competitiveness, in turn, leads to environmental and social innovations. Therefore, when companies lead with more stakeholders and a foreign market, they need to do more to be able to compete. Besides that, economic freedom can reduce the effects of corruption and encourage companies to take greater responsibility for their impacts on social well-being.

Analyzing the control variables, we have that the greater the company's total market value, the greater the ESG, environmental and social performance. The findings show that the larger the size of the company, the greater its ESG, environmental and governance performance. In practice, this means that larger companies have more financial resources to adhere to ESG practices. These findings are in line with several previous studies (Orzes et al., 2020; Tashman et al., 2019; Wong et al., 2021) that have already shown that larger companies tend to impact society more, which increases their interest in ESG performance.

Regarding the companies' long-term debt, that is, leverage, it did not have a significant effect on the dependent variables. This indicates that it is not yet clear what the effects of corporate leverage on ESG performance are. The results demonstrate that a board with more directors positively affects the company's performance in corporate governance. Greater board size promotes diversity of ideas, as people come from different backgrounds. Thus, larger boards can favor the quality of corporate governance.

The higher percentage of women on the board of directors provides a higher performance both for ESG and its variations, indicating that the presence of more women on the board of directors helps companies to have greater environmental, social and governance performance. Women on boards are twice as likely to have a doctorate than men (Hillman & Dalziel, 2003). Women on boards also tend to have additional technical training that is unrelated to the area of management, which makes it possible for them to bring agendas such as social responsibility to meetings (Gaio & Gonçalves, 2022).

As for the social responsibility committee, we observed that when the company has such a committee, it presents a better performance in the ESG and in its pillars as well. In addition, the company being a signatory to the UN Global Compact has a positive impact on ESG performance and its environmental and social variations. The results allow us to conclude that the presence of a sustainability committee and the adoption of the Global Compact are crucial

for companies to have greater ESG performance, as shown in previous studies (Abdi et al., 2022; Latapí Agudelo et al., 2020; Orzes et al., 2020; Rosati & Faria, 2019).

4.3 Robustness Analysis

In Table 5, we present the results found for the relationships of influence of the independent variables on the dependent one (ESG and its variations), excluding companies based in the United States. We performed this robustness analysis to confirm the previous results, as the United States has many companies, and this could bias the research results.

Table 5. Robustness Analysis Results.

	Model I - ESG	Model II - E	Model III - S	Model IV - G
Variable	Coef. (sig)	Coef. (sig)	Coef. (sig)	Coef. (sig)
RULLAW	-8.632***	-4.158*	-7.742***	-15.49***
ECOFRE	0.284 (0.120)	0.179 (0.454)	0.187 (0.459)	0.615***
EDUIND	-0.704 (0.127)	-1.647 (0.178)	-0.615 (0.161)	0.308 (0.508)
TRAINT	7.671***	6.602***	8.369***	8.433***
MARKCAP	4.102**	7.592***	7.449***	-3.806 (0.141)
ROE	-2.435 (0.265)	-3.561 (0.213)	-1.553 (0.607)	-1.304 (0.684)
FIRMSIZE	3.738**	5.932**	-2.339 (0.362)	8.173***
LEVERAGE	0.117 (0.705)	0.306 (0.449)	-0.008 (0.985)	0.216 (0.633)
BOARDSIZE	-0.053 (0.823)	-0.137 (0.657)	-0.268 (0.414)	0.264 (0.447)
BOARDIND	0.048**	-0.104***	-0.053 (0.198)	0.391***
BOARDIVER	0.204***	0.160**	0.162**	0.295***
CSRCOM	13.34***	12.84***	17.81***	8.237***
UNSIGN	9355***	10.12***	15.12***	-0.421 (0.850)
_CONS	-99.70***	-121.2***	-68.77***	-119.6***
Obs.	566	566	566	566
R^2	0.5234	0.5069	0.4019	0.3191
VIF	3.92	3.92	3.92	3.92
Breusch-Pagan test	0.0005	0.0148	0.0725	0.0007
Durbin-Watson test	No endogenous	No endogenous	No endogenous	No endogenous
Wald x^2 test	608.01	567.93	374.22	258.48
Hausman test	Fixed effects	Fixed effects	Fixed effects	Fixed effects

***p<0.01. **p<0.05. *p<0.10.

In general, the results of the robustness analysis are similar to the previous findings. The rule of law has a negative effect on ESG performance and its pillars. When looking at economic freedom, the results demonstrate a significant impact on the corporate governance variable. This means that in countries with greater economic freedom, companies perform better in governance. The presence of American companies has influenced economic freedom to have a positive and significant effect on ESG performance. The results confirm that companies based in countries that are easier to market their products internationally tend to have better ESG performance.

Analyzing the market capitalization and company size variables, we confirm that larger companies tend to make more investments in environmental, social and governance issues, to

meet the needs of their stakeholders. The greater number of independent directors positively affects ESG performance, which confirms the previous results. Finally, the variables gender diversity on the board, the presence of a CSR committee and the adoption of the Global Compact positively affect ESG performance and its variations.

These additional findings show that despite the greater number of companies in our sample being based in the US, this does not compromise the robustness of the analysis, but complements the explanations of the data.

5 CONCLUSIONS AND IMPLICATIONS

Drawing on the institutional diversity across countries, this paper aimed to examine the role of institutional quality of countries on the ESG performance of their companies. We measure institutional quality by four variables: rule of law, economic freedom, education index, and freedom to trade internationally. To measure ESG performance, we used indicators from the Refinitiv Eikon database, as this database presents 70 key indicators related to ESG performance, being one of the most reliable sources to compare data from companies around the world.

The findings reveal that institutional quality matters for ESG performance. Companies that are based in countries with greater economic freedom and in countries that favor the trade of their companies in the international market tend to have better engagement in environmental, social and governance issues. Furthermore, the results confirm that in countries with better education, companies tend to have better governance.

Several implications can be derived from this analysis. First, our results show that not only do internal factors interfere with ESG performance, but also institutional factors have a significant effect on companies' performance in environmental and social issues. These findings reinforce the theoretical foundations of Institutional Theory, which states that organizational behavior is shaped by the national context in which firms operate. The importance of this study also resides in the fact that there are still no studies that relate institutional quality and ESG performance specifically in the energy sector.

In addition to the academic level, the results have managerial implications. The findings allow managers to better understand how the institutional environment demands ESG efforts by companies. Companies in the energy sector may have different ESG priorities depending on the country in which they operate. Stakeholders expect companies to meet their needs and by having a higher ESG performance, companies bring benefits not only to shareholders, but also to society. Our results encourage managers to look at institutional quality at the country level. In addition, we suggest that managers implement a CSR committee and adopt the Global Compact if they want their companies to have better ESG performance.

Additionally, our evidence may be useful to international policy makers as they can reinforce that greater economic freedom, better education, and greater freedom to trade internationally stimulate greater ESG performance. We also suggest that regulators might consider enacting legislation on this type of activity to ensure the credibility and reliability of ESG information disclosed.

The provided findings are not free from limitations. The study analyzed only large companies in the energy sector, and this makes it impossible for the findings to be generalized to small companies and other industries. Future studies should include a larger sample of emerging countries and consider the inclusion of other industry sectors. Furthermore, researchers should include variables at the institutional level that are still little explored in the

literature. Finally, we recommend using other databases to collect the ESG performance of companies.

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