
Internationalization's Function in Reducing the Effect of ESG Disclosure on Financial Results: Case of Companies in the United Kingdom

Submitted 12/05/25, 1st revision 27/06/25, 2nd revision 18/07/25, accepted 20/08/25

Adel Necib¹, Anis Jarboui², Malek Elweeremmi³

Abstract:

Purpose: This study aims to investigate how disclosures on social, environmental, and governance practices affect the financial performance of non-financial companies listed on the London Stock Exchange's FTSE 100 from 2015 to 2024.

Design/Methodology/Approach: To clarify the relationships between the variables, we used regression analysis on moderated data and regression on subgroups.

Findings: The results reveal an unexpected finding: while the indicator of social responsibility has no discernible effect on the financial performance of businesses, the indicators of environmental responsibility and disclosure of governance practices cause a decline in business financial performance. It is possible to view the expenses associated with ESG practices as a waste of company resources, a misallocation, or, conversely, as an overinvestment.

Practical Implications: Businesses that engage in internationalisation may see a decline in performance as a result of environmental responsibility disclosure and governance practices. In order to ensure the sustainability of environmental, social, and governance activities over the long term, managers must consistently provide higher and better financial performance.

Originality/Value:

Keywords: FTSE 100, CSR, ESG, corporate governance, financial performance.

JEL Classification: G32, M14, F23, Q56, G38.

Paper type: Research article..

¹University of GAFSA, Dept. of Mathematics, Tunisia, e-mail: adelnecib314@gmail.com;

²University of SFAX, Tunisia, e-mail: anisjarboui@gmail.com;

³University of Gabes, Tunisia, e-mail: malekelweremmi@gmail.com;

1. Introduction

Environmental, social, and governance (ESG) practices are becoming increasingly important in today's economic conversations. Businesses are becoming more and more aware of the significance of making their ESG data public in response to growing public expectations on sustainable and responsible business practices (Finger and Rosenboim, 2022 ; Noja *et al.*, 2021).

The relationship between ESG practices and business financial performance has drawn significant attention on a global scale, including in the UK. Adoption of ESG practices is linked to improved financial stability, durability (Souza Barbosa *et al.*, 2023), and worldwide business success (Necib *et al.*, 2025), particularly during challenging times like the COVID-19 pandemic (Mulyono, 2023).

The theory of stakeholders, as put forth by Freeman (1984), is frequently at the centre of theoretical disputes on ESG practices. This management theory emphasises the need to consider the interests of all stakeholders involved in the organisational decision-making process, emphasising the creation of value for all parties involved beyond straightforward actionnaires.

According to the theory of parties involved, effective ESG disclosure can improve an organization's financial performance by reducing information asymmetry and meeting stakeholder demands (Pulino *et al.*, 2022). Businesses that prioritise the interests of stakeholders in their ESG practices and disclosures are better positioned to increase stakeholder satisfaction and achieve superior financial performance (Wasiuzzaman *et al.*, 2023). ESG disclosure not only increases transparency and reduces information asymmetry, but it also raises investors' confidence in the company's long-term outlook by bringing about improved risk management, increased efficiency, and cost reduction (Pulino *et al.*, 2022).

Numerous previous studies have highlighted the benefits of ESG practices and disclosures on the company's value, capital costs, and even operational and financial performance (Rohendi *et al.*, 2024; Veeravel *et al.*, 2024). However, these studies are less focused on examining how internationalisation affects the relationship between ESG disclosures and business financial performance, particularly in global financial markets.

By meeting the demands of foreign markets, internationalisation enables businesses to achieve more significant economies of scale (Grünig and Morschett, 2016). Larger production scales can lower single-source costs, allowing businesses to maintain their competitiveness despite the additional costs incurred to comply with ESG standards.

According to the findings of Plastun *et al.* (2020), European nations are recognised as global leaders in ESG disclosure. This leadership is mostly due to stringent

government regulations and vigorous local stock exchange participation. The consistent implementation of ESG practices throughout European nations has yielded very positive results. 2020 marked a significant turning point in the global acceptance of ESG practices. Since then, the amount of green obligations issued in Europe has surpassed that of America and Asia, totalling 160 million dollars compared to 60,8 million and 32,7 million, respectively (Marsh, 2020).

However, between 2018 and 2020, all ASEAN nations saw an increase in ESG disclosure. These figures highlight how important it is to implement and disclose ESG in commercial operations on developed markets, including non-financial companies listed on the London Stock Exchange (FTSE 100). This has significant ramifications for financial managers and investors, making it a topic relevant to academic research.

ESG disclosure has evolved into a key tool for businesses to provide their ESG management practices and information about investor risks. This disclosure may affect an organization's market value and financial performance (Grishunin *et al.*, 2022 ; Cristea *et al.*, 2022).

This study has two significant contributions. First off, this adds to the body of literature by expanding the limited research on the relationship between ESG disclosure and business financial performance, a topic that is rarely examined in emerging markets (Lubis and Rokhim, 2021). This is accomplished by looking at disclosure on a larger scale, which includes all non-financial companies in the United Kingdom.

Furthermore, the current study demonstrates the effect of internationalisation on the relationship between ESG disclosure and financial performance of businesses, drawing on the work of Chen and Xie (2022), who called on ESG investors, and Elmghaamez *et al.* (2023), who used direction committees as moderators. This study also fills a gap in the existing literature by offering fresh insights into the financial performance of businesses based on return on assets and net profit margin, thanks to previously unpublished data from the Bourse de Londres (FTSE 100) data base. It considers the environmental, social, and corporate governance (ESG) aspects on an individual basis and examines the impact of international expansion policies of businesses (Grima *et al.*, 2024).

The purpose of this study is to examine the impact of disclosures related to ESG dimensions environmental, social, and corporate governance and internationalisation through exports on various financial performance indicators of businesses, particularly return on assets and net profit margin. This could therefore enhance academic discourse and managerial practice. It is reasonable to assume that the implications of ESG disclosure in all its forms and foreign market expansion lead to improved financial performance for businesses, regardless of their particular type. A moderated regression model is employed in this study to investigate the relationship

between various ESG disclosures and various business financial performance metrics.

This research was carried out in the United Kingdom, a developed nation with significant economic potential but inadequate ESG implementation. Furthermore, the United Kingdom is faced with the responsibility of implementing the Sustainable Development Goals (ODD), which have been in effect on a global scale for a number of years. The United Kingdom has become a major economic force in Europe thanks to its abundant natural resources, priceless human resources, and geographic advantages. Ceci fully explains why this study is relevant. The research sample consists of 620 companies (based on specifics) drawn from the FTSE 100 data base for the years 2015-2024.

This article has a traditional structure with clearly defined sections. The literature is reviewed in the first section, the research plan and sample makeup are described in the second, and the empirical analysis's findings are presented in the third. The article is concluded in the final section.

2. Literature Review and Hypothesis Development

The most recent trends show a noticeable shift in business practices, with companies now considering environmental, social, and governance (ESG) factors in addition to profit maximisation. Even though ESG disclosure is widely regarded as a critical indicator of an organization's sustainability, there hasn't yet been a standardisation of these reports (Khan, 2022). ESG disclosure can lessen information asymmetry and increase investors' trust in an organization's long-term outlook, which will improve risk management, increase efficiency, and lower costs (Pulino *et al.*, 2022).

This will ultimately have a positive effect on financial performance and market value (Grishunin *et al.*, 2022). Additionally, ESG disclosure provides valuable insights into how businesses manage environmental, social, and governance risks (Buallay, 2019 ; Pagkalou *et al.*, 2025).

By taking a proactive approach to these risks, businesses can lessen the negative effects that could occur on their financial performance, preventing potentially damaging events, regulatory penalties, and reputational harm. Furthermore, according to ESG reports, implementing sustainable practices may enhance operational efficiency and stimulate innovation (Lian *et al.*, 2023).

A significant amount of research has been done to look at the relationship between ESG and business financial success, however the findings are conflicting. According to theoretical reasons, a favourable and significant relationship between ESG and business success was established in a meta-analysis conducted by Huang (2021). Other empirical findings by Bahadori *et al.* (2021) and Platonova *et al.* (2018)

support a positive correlation between ESG disclosure and business financial performance.

However, the execution of ESG standards is sometimes insufficient, particularly in developing nations, and ESG disclosure may harm an organization's reputation and financial success. Furthermore, ESG practices and disclosures come with risks and expenses, particularly in the short term, and these costs may have an impact on the company's financial performance (Alareeni and Hamdan, 2020).

According to Fahad and Busru (2021) and Wasiuzzaman *et al.* (2023), there is a negative correlation between financial performance and ESG disclosure. A cumulative disclosure of ESG may reduce financial performance due to higher costs for businesses, according to Oware and Mallikarjunappa (2022).

Saygili *et al.* (2022) claim that environmental disclosure has a negative impact on businesses' financial success. According to a review of the literature by Khan (2022), studies indicating a negative relationship between ESG and financial performance primarily originate from a European setting that indicates a positive impact.

Though ESG practices may eventually lead to better financial performance through improved reputation, increased investor trust, and effective risk management, they may also result in short-term costs and challenges that make up financial fardeaux, particularly in developed nations. Therefore, it is crucial for businesses to strategically balance their ESG practices in order to maximise their financial performance. Based on these conversations, the study's main hypotheses have been defined as follows:

H1a. *Financial performance declines with increased environmental ESG disclosure.*

H1b. *Financial performance declines with increased social ESG disclosure.*

H1c. *Increased governance transparency Financial performance is negatively impacted by ESG.*

The exporting activities are a type of internationalisation that is frequently used by large corporations. The most common factor driving internationalisation is the need to find new customers in order to increase business volume and contribution margins (Moghaddam *et al.*, 2014). The need to achieve cost savings is the second force behind globalisation (Grünig and Morschett, 2016).

It is possible to spread fixed costs over a larger number of products by entering new markets. Economies d'échelle will appear in this context. Diversification of operational risk is the fourth reason to internationalise (Gaur and Kumar, 2010). Businesses can occasionally make up for a decline in demand in a region by serving other geographic markets.

The expansion of economic benefits through market-oriented strategies, leveraging economies of scale, and valuing learning experiences is influenced by the degree of internationalisation (Contractor, 2012). Therefore, it is anticipated that these benefits of internationalisation will result in improved performance.

According to research by Manotas and Gonzalez-Perez (2020), internationalisation has a positive effect on the likelihood that performance will improve, increasing the competitiveness of PMEs. Through internationalisation, businesses can achieve more significant economies of scale by meeting the demands of other markets (Grünig and Morschett, 2016).

Even though larger-scale production may need additional costs to comply with ESG standards, it can lower costs per unit, allowing businesses to maintain their competitiveness. As we believe, this is the first study to work together on internationalisation policies of businesses linked to ESG disclosure and financial success, especially in the largest European economy. Based on these discussions, the study's hypotheses have been established as follows:

H2a. *The effect of environmental ESG disclosure on financial performance is mitigated by internationalisation.*

H2b. *The effect of social ESG disclosure on financial performance is mitigated by internationalisation.*

H2c. *The effect of governance and ESG disclosure on financial performance is mitigated by internationalisation.*

3. Data and Methodology

3.1 Population and Sample

This study focusses on non-financial businesses in the manufacturing, mining, commerce, and services sectors that are listed on the stock exchange of the United Kingdom, the largest economy in Europe. The study used an empirical test approach and covered a 10-year period from 2015 to 2024.

The operational activities of non-financial businesses are frequently linked to physical assets and processes that affect society and the environment. For instance, a manufacturing company must oversee its supply chain, manufacturing process, and waste disposal, all of which have an impact on ESG.

On the other hand, financial businesses focus primarily on financial transactions and services, which are less directly related to physical environmental effects. Therefore, this study on non-financial businesses provides a stronger foundation for this research. The final population consisted of 620 companies.

3.2 Dependent Variables

The annual report of the company was used to determine the return on assets (ROA) and the net profit margin (NPM) (Table 1). These variables accurately reflect the components of the company's financial success. By dividing the net profit by the total number of assets, the asset's return has been calculated (Necib, 2025). For example, the net profit after taxes has been divided by the entire sales or total business revenue to estimate the net profit margin (Saygili *et al.*, 2022). The purpose of using two dependent variables is to increase the test's solidity.

3.3 Independent Variables

The ESG data was gathered via annual reports, sustainability reports, RSE reports, and company websites. The ESG is a multifaceted index that relies on the disclosure of environmental, social, and governance factors as well as the influence of one dimension that occasionally overshadows the impact of another. It would be beneficial in this situation to have separate data available (Buallay *et al.*, 2021).

Therefore, this study considered three different ESG scores: environmental disclosure (ENVD), social disclosure (SOCD), and corporate governance disclosure (GOVD). This classification made it possible to determine which ESG score component had the biggest impact on an organization's financial performance. Saygili *et al.* (2022) divided the ESG disclosure indicators into 21 components with a total of 112 sub-components. Each component and sub-component was evaluated by assigning a score of 1 to businesses that implemented each item, and a score of 0 to those who did not (see Annexe).

The disclosure of environmental responsibility used one element (EDS) with 15 sub-elements, the disclosure of social responsibility used five elements (SP, SPM, HRP, RCS, ERSR) with 22 sub-elements, and the disclosure of governance used fifteen elements (ESR, SIR, GAR, VR, MR, DR, TS, CW, AR, BDF, BDA, BDS, BDM, BDC, and BDR) with 75 sub-elements. Each disclosure indicator, including ESG, ENVD, SOCD, and GOVD, was then totalled and divided by the number of corresponding secondary elements (Saygili *et al.*, 2022).

3.4 Moderating Variable

The term "internationalisation" (INT) was taken from the company's annual report and financial records. Internationalisation has been chosen as a moderator that influences the relationship between ESG disclosure and business performance because it enables businesses to achieve more significant economies of scale by meeting the demands of foreign markets (Grünig and Morschett, 2016). Increasing output may result in lower unit costs, allowing businesses to maintain their competitiveness despite the additional expenses incurred to adhere to ESG

standards. Internationalisation is a hypothetical variable that has a value of 1 for exporting businesses and 0 for non-exporting businesses.

3.5 Control Variables

The selection of the control variables was based on a review of the literature and is in line with recent research (Habib and Mourad, 2024). The ratio of liquidity general (CR) was calculated by dividing current assets by current liabilities, the *taux de rotation des actifs* (TATO) was calculated by dividing net business revenue by the average of total assets at the beginning and end of the year, and the report of end-of-term (DER) was established by dividing total debt by total assets. Using the logarithm of the total assets, the size of the business (SIZE) has been calculated.

Table 1. Variable measurement

Variables	Symbol	Measurement
<i>Dependent variables:</i> • return on asset • net profit margin	ROA NPM	• dividing post-tax profit by total assets • dividing net post-tax profit by total sales or total net revenue
<i>Independent variables:</i> • environmental disclosure • social disclosure • governance disclosure	ENVD SOCD GOVD	• See Appendix
<i>Moderating variable:</i> internationalisation	INT	dummy variable with a value of 1 for companies that export and 0 otherwise
<i>Control variables:</i> • current ratio • total asset turnover • debt-to-equity ratio • firm size	CR TATO DER SIZE	• dividing current assets by current liabilities • dividing net sales by the average of total assets at the beginning and end of the year • dividing total debt by total equity • the natural logarithm of total assets

Source: Own work.

3.6 Empirical Model

This study is based on recent research by Soesetio *et al.* (2023), which employed two moderated regression techniques: moderated regression analysis and moderated regression analysis by subgroup. The purpose of selecting these two regression by moderation techniques was to provide a robust test. The results and conclusions pertaining to the relationships between the variables were to be strengthened by the use of these two analytical tools as well as different substitutes for the same variable.

Equations 1, 2, and 3 demonstrate regression equations using the modéré regression analysis method, which enables assessing the independent influence of the moderator factor as well as the interaction between the independent and moderator

factors. Thus, this method enables the determination of whether the moderating variable may directly affect the dependent variable as well as the effect of the combination of independent and moderating variables on the dependent variable.

This method consists of three steps: (1) the regression equation of independent variables and control over the dependent variable; (2) the regression equation of independent variables, moderators, and control over the dependent variable; and (3) the regression equation of independent variables, moderators, interaction, and control over the dependent variable. While analogous models have been estimated for the NPM, the presented equations use the ROA as a dependent variable.

$$ROA_{i,t} = \alpha_{i,t} + \beta_1 ENVD_{i,t} + \beta_2 SOCD_{i,t} + \beta_3 GOVD_{i,t} + \beta_4 CR_{i,t} + \beta_5 TATO_{i,t} + \beta_6 DER_{i,t} + \beta_7 SIZE_{i,t} + \varepsilon_{i,t} \quad (1)$$

$$ROA_{i,t} = \alpha_{i,t} + \beta_1 ENVD_{i,t} + \beta_2 SOCD_{i,t} + \beta_3 GOVD_{i,t} + \beta_4 CR_{i,t} + \beta_5 TATO_{i,t} + \beta_6 DER_{i,t} + \beta_7 SIZE_{i,t} + \beta_8 INT_{i,t} + \varepsilon_{i,t} \quad (2)$$

$$ROA_{i,t} = \alpha_{i,t} + \beta_1 ENVD_{i,t} + \beta_2 SOCD_{i,t} + \beta_3 GOVD_{i,t} + \beta_4 CR_{i,t} + \beta_5 TATO_{i,t} + \beta_6 DER_{i,t} + \beta_7 SIZE_{i,t} + \beta_8 INT_{i,t} + \beta_9 ENVD*INT_{i,t} + \beta_{10} SOCD*INT_{i,t} + \beta_{11} GOVD*INT_{i,t} + \varepsilon_{i,t} \quad (3)$$

Equations (4) and (5) show the regression problems of the moderating analysis by subgroup method, which is used to determine whether the effect of the independent variable on the dependent variable varies throughout subgroups within the sample. The subgroups in this study were defined based on the company's foreign market share expansion over the study period. To ascertain if a variable acts as a moderator, this method employed the Chow test.

Using the method of regression by subgroup, the Chow test was used to determine whether a variable plays the role of moderator (Hair Jr. *et al.*, 2014). The formula for the Chow test is shown in equation 6, where RSS_r is equal to the sum of the restrained squares for the entire set of observations; RSS_{ur} is the sum (or restreinte) of the restrels for equations (4) and (5); k is the number of independent variables for equations (4) and (5); n₁ is the number of total observations for equation (4); and n₂ is the number of total observations for equation (5). The value of F fits the so-called Snedecor distribution.

$$ROA_{export_{i,t}} = \alpha_{i,t} + \beta_1 ENVD_{export_{i,t}} + \beta_2 SOCD_{export_{i,t}} + \beta_3 GOVD_{export_{i,t}} + \varepsilon_{i,t} \quad (4)$$

$$ROA_{non\ export_{i,t}} = \alpha_{i,t} + \beta_1 ENVD_{non\ export_{i,t}} + \beta_2 SOCD_{non\ export_{i,t}} + \beta_3 GOVD_{non\ export_{i,t}} + \varepsilon_{i,t} \quad (5)$$

$$F = \frac{\frac{RSS_r - RSS_{ur}}{k}}{\frac{RSS_{ur}}{n_1 + n_2 - 2k}} \quad (6)$$

Subsequently, to determine the best regression method for each model in order to obtain valid and reliable estimation results in regression analysis, Chow and Hausman tests were conducted. The Chow test was used to determine the better model between the common effect (CE) model and the fixed effect (FE) model in panel data models.

If the p-value was smaller than the significance level α , then H1 was accepted and H0 was rejected, indicating that the chosen model was the fixed effect (FE) model. The Hausman test was used to determine the better model between the random effect (RE) model and the fixed effect (FE) model in panel data models. If the p-value was smaller than the significance level α , then H1 was accepted and H0 was rejected, indicating that the chosen model was the fixed effect (FE) model. In this study, the best regression method identified is the fixed effect model.

4. Empirical Results

According to Table 2, the average disclosure rate for environmental responsibility (ENVD) is only 49.81%. This means that these businesses only implement and/or disclose 49.81% of their environmental responsibilities. It appears that non-financial businesses in the UK do not place a high value on disclosing their environmental responsibilities. Nonetheless, disclosures pertaining to governance (GOVD) and social responsibility (SOCD) are thought to be essential for these businesses. The average rate of disclosure for social responsibility is 86.27%, while the average rate for governance is 94.73%.

This means that these businesses have implemented and/or disclosed 86.27% of their social responsibilities and 94.73% of their governance. The non-financial businesses in the United Kingdom faced performance-related challenges. Even though more than half of these businesses engage in internationalisation and exporting activities, the average return on assets (ROA) is 0.0417 and the average net profit margin (NPM) is -0.0066.

On average, these companies' short-term assets are nearly twice as high as their short-term liabilities, with a mean liquidity index (CR) of 2.0004. The average rotation of assets (TATO) ratio is 0.9004, whereas the average end-of-life ratio (DER) is 1.2487, indicating a moderate effect. The average size of these businesses is 31,4578, which is a significant amount.

Tables 3 and 4 show that return on assets (ROA) and net profit margin (NPM) are considerably impacted by environmental responsibility disclosure (ENVD). These findings suggest that businesses do worse when they reveal more information about their environmental responsibilities. This result confirms earlier research by Lubis and Rokhim (2021) that found a negative relationship between a company's financial performance and its disclosure of environmental responsibility.

It also supports the research by Buallay *et al.* (2021), which finds a strong inverse association between financial performance and ESG in both industrialised and developing nations.

Table 2. *Descriptive statistics*

Variable	Mean	SD	MIN	MAX
ROA	0.0417	0.4163	-8.547	9.8025
NPM	-0.0066	0.7015	-8.7376	7.0582
ENVD	0.4981	0.3218	0	1
SOCDD	0.8627	0.0455	0.4318	0.9371
GOVD	0.9473	0.0399	0.7631	0.9836
CER	2.0004	1.71241	0.0008	10.6874
TATO	0.9004	0.8531	0	10.4587
DER	1.2487	1.6325	-8.1228	10.5214
SIZE	31.4578	1.7125	26.0446	35.785
INT	0.5464	0.5004	0	1

Source: *Own work.*

While studies based in the US and the EU find a positive influence, Khan (2022) notes that evidence indicating a negative relationship between ESG and financial success comes from the Asian context. Furthermore, this analysis shows that internationalisation mitigates the adverse effects of ENVD on ROA and NPM. This implies that the detrimental effects of ESG disclosure are lessened if businesses engage in internationalisation and reveal information on environmental responsibility.

It has been determined that financial performance, ROA, and NPM are not significantly impacted by disclosure of social responsibility (SOCDD). A company's financial success is unaffected by the extent of information disclosure related to social responsibility. The findings of Buallay *et al.* (2020), who discovered that social responsibility had no discernible effect on financial performance, are in line with this outcome.

Moreover, the impact of SOCDD on ROA and NPM is not mitigated by internationalisation. Whether or not a firm has an international focus, the disclosure of social responsibility does not ensure that it will have a positive or negative effect on its financial success. The application of CSR is frequently not noticed by foreign organisations and stays inside the domestic setting.

ROA and NPM suffer when governance disclosure (GOVD) is present. Similar to environmental responsibility, corporate governance disclosure may result in a drop in a company's financial performance. Although these adjustments are anticipated to improve the company's long-term stability and reputation, the initial costs may have a negative effect on short-term financial performance (Alareeni and Hamdan, 2020).

These findings, however, go counter to earlier research that portrays ESG ratings as a quantifiable way to gauge stakeholder satisfaction and a source of competitive advantage in terms of improved financial performance (Velte, 2017) and cheaper capital costs (Ratajczak and Mikołajewicz, 2021).

According to the study's moderation analysis, internationalisation has no moderating influence on the relationship between GOVD and ROA and NPM. These findings suggest that multinational corporations cannot be certain that their financial performance will be positively or negatively impacted by governance transparency policies.

Companies benefit from the current ratio (CR), which has a positive impact on ROA and NPM. The financial performance of an organisation will improve as its liquidity increases. These findings provide credence to the notions advanced by Sudirman *et al.* (2020) and Farhan *et al.* (2019) that a company's financial performance might be positively impacted by the current ratio. Furthermore, a company's financial success is greatly influenced by its total asset turnover (TATO).

Increased asset turnover is a sign that a business is making good use of its resources to produce revenue (Soesetio, Rudiningtyas, et al., 2023). Prior studies by Grozdić *et al.* (2020) and Le Thi Kim *et al.* (2021), which found a positive correlation between asset turnover and business performance, are supported by our findings.

It has been determined that DER and a company's financial performance, as determined by ROA, are negatively correlated. According to Teoh's (2021) findings, the DER ratio can have a detrimental impact on a company's financial success, as seen by the statistically significant negative coefficient for the DER at the 0.01 level when the dependent variable is ROA. Neither ROA nor NPM are significantly impacted by the size of the company (SIZE). These findings are consistent with Meiryani et al. (2020). This suggests that even though larger businesses could have more assets, this does not always mean that shareholders would receive higher profits.

By separating the échantillon using indicators, Tables 5 and 6 validate the findings of the study on the role of internationalisation (INT) in the relationship between ESG disclosure and financial performance of businesses. The coefficient values indicate that the disclosure of environmental responsibility in businesses focused on exporting (-0.014; -0.018) has lower values than in businesses not focused on exporting (-0.034; -0.088).

These results indicate that societies focused on exporting may be better able to mitigate the negative effects of environmental responsibility disclosure on business financial performance. Whether or not an organisation is focused on exporting, the disclosure of its social responsibility does not appear to have a significant effect on its financial performance.

Conversely, the percentage of governance disclosure for businesses focused on exporting (-0,719; -0,989) is higher than that of businesses not focused on exporting (-0,469; -0,662). This means that it is possible to more effectively address the negative impact of governance disclosure on the financial performance of non-exporting businesses.

Table 3. Moderated regression analysis results of ROA

Variable	ROA								
	(1)			(2)			(3)		
ENVD	-0.018*** (0.007)			-0.018*** (0.007)			-0.024*** (0.008)		
ENVD*INT							0.022*** (0.013)		
SOCD		-0.029 (0.079)			-0.029 (0.079)			-0.080 (0.113)	
SOCD*INT								0.131 0.168	
GOVD			-0.398*** 0.114			-0.398*** 0.114			-0.371*** 0.142
GOVD*INT									-0.152 (0.231)
INT				0.015*** (0.003)	0.015*** (0.003)	0.016*** (0.003)	0.002 (0.007)	-0.087 (0.152)	0.170 (0.212)
CR	0.006*** (0.002)	0.006*** (0.002)	0.007*** (0.002)	0.006*** (0.002)	0.006*** (0.002)	0.007*** (0.002)	0.006*** (0.002)	0.006*** (0.002)	0.006*** (0.002)
TATO	0.029*** (0.006)	0.027*** (0.006)	0.027*** (0.006)	0.029*** (0.006)	0.027*** (0.006)	0.027*** (0.006)	0.030*** (0.006)	0.027*** (0.006)	0.027*** (0.006)
DER	-0.005*** (0.002)	-0.005*** (0.002)	-0.005*** (0.002)	-0.005*** (0.002)	-0.005*** (0.002)	-0.005*** (0.002)	-0.005*** (0.002)	-0.005*** (0.002)	-0.005*** (0.002)
SIZE	0.002 (0.004)	0.002 (0.004)	-0.003 (0.002)	0.001 (0.004)	0.002 (0.004)	-0.003 (0.003)	0.002 (0.003)	0.002 (0.004)	-0.003 (0.002)
Constant	-0.024 (0.092)	-0.023 (0.092)	0.548*** (0.132)	-0.028*** (0.093)	0.150*** (0.114)	0.0532*** (0.0128)	-0.027*** (0.093)		
R-Squared	0.096	0.083	0.097	0.096	0.083	0.097	0.099	0.083	0.097
N	620	620	620	620	620	620	620	620	620

Note: Numbers (1), (2), (3) show the equations of each moderated regression analysis method in Section 2.6. The models are estimated as fixed effects panel regression with robust standard errors that are shown in parentheses. Statistical significance levels denoted by **, and *** represent 0.05, and 0.01 levels, respectively. ENVD – environmental responsibility disclosures; SOCD – social responsibility disclosures; GOVD – governance disclosures. ROA is the dependent variable. N denotes the number of companies.

Source: Own work.

Table 4. Moderated regression analysis results of NPM

Variable	NPM								
	(1)			(2)			(3)		
ENVD	-0.046*** (0.015)			-0.046*** (0.015)			-0.078*** (0.026)		
ENVD*INT							0.071*** (0.028)		
SOCD		0.163 (0.142)			0.163 (0.142)			0.093 (0.143)	
SOCD*INT								0.174 (0.303)	
GOVD			-0.629*** (0.243)			-0.630*** (0.244)			-0.538* (0.341)
GOVD*INT									-0.176 (0.512)
INT				0.055*** (0.015)	0.056*** (0.014)	0.059*** (0.014)	0.016 (0.024)	-0.091 (0.260)	0.228 0.441
CR	0.015*** (0.004)	0.016*** (0.004)	0.015*** (0.004)	0.015*** (0.004)	0.016*** (0.004)	0.015*** (0.004)	0.015*** (0.004)	0.016*** (0.004)	0.015*** (0.004)
TATO	0.028*** (0.008)	0.027*** (0.008)	0.024*** (0.009)	0.028*** (0.008)	0.027*** (0.008)	0.024*** (0.009)	0.028*** (0.008)	0.027*** (0.008)	0.024*** (0.009)
DER	-0.003 (0.002)	-0.002 (0.002)	-0.003 (0.002)	-0.003 (0.002)	-0.002 (0.002)	-0.003 (0.002)	-0.003 (0.002)	-0.002 (0.002)	-0.003 (0.002)
SIZE	0.009 (0.008)	-0.002 (0.007)	-0.0000 (0.007)	0.009 (0.008)	-0.002 (0.007)	-0.0000 (0.007)	0.013 (0.008)	-0.002 (0.007)	-0.0000 (0.007)
Constant	-0.225 (0.197)	-0.044 (0.206)	0.620** (0.291)	-0.254 (0.198)	-0.074 (0.206)	0.591** (0.283)	-0.244 (0.196)	-0.014 (0.208)	0.504 (0.352)
R-Squared	0.051	0.042	0.044	0.051	0.042	0.044	0.051	0.042	0.044
N	620	620	620	620	620	620	620	620	620

Note: Numbers (1), (2), (3) show the equations of each moderated regression analysis method in Section 2.6. The models are estimated as fixed effects panel regression with robust standard errors that are shown in parentheses. Statistical significance levels denoted by *, **, and *** represent 0.1, 0.05, and 0.01 levels, respectively. ENVD – environmental responsibility disclosures; SOCD – social responsibility disclosures; GOVD – governance disclosures. NPM is the dependent variable. N denotes the number of companies.

Source: Own work.

Table 5. Sub-regression of ROA by internationalisation

Variable	ROA					
	(1)	(2)	(1)	(2)	(1)	(2)
ENVD	-0.014* (0.008)	-0.034*** (0.007)				
SOCD			0.014 (0.170)	-0.074 (0.060)		
GOVD					-0.719*** (0.211)	-0.469*** (0.183)
Constant	0.045*** (0.005)	0.044*** (0.004)	0.028 (0.151)	0.095** (0.050)	0.806*** (0.194)	0.482*** (0.155)
R-Squared	0.007	0.035	0.000	0.000	0.027	0.017
N	620	620	620	620	620	620

Note: (1) export firms group, (2) non-export firms group. The models are estimated as fixed effects panel regression with robust standard errors that are shown in parentheses. Statistical significance levels denoted by *, **, and *** represent 0.1, 0.05, and 0.01 levels, respectively. ENVD – environmental responsibility disclosures; SOCD – social responsibility disclosures; GOVD – governance disclosures. NPM is dependent variable. N denotes the number of companies.

Source: Own work.

Table 6. Sub-regression of NPM by internationalisation

Variable	NPM					
	(1)	(2)	(1)	(2)	(1)	(2)
ENVD	-0.018* (0.017)	-0.088*** (0.024)				
SOCD			0.063 (0.251)	0.084 (0.091)		
GOVD					-0.989*** (0.380)	-0.662* (0.375)
Constant	0.071*** (0.008)	0.094*** (0.009)	0.002 (0.211)	-0.010 (0.080)	0.942*** (0.352)	0.681** (0.643)
R-Squared	0.004	0.040	0.000	0.000	0.015	0.005
N	620	620	620	620	620	620

Note: (1) export firms group, (2) non-export firms group. The models are estimated as fixed effects panel regression with robust standard errors that are shown in parentheses. Statistical significance levels denoted by *, **, and *** represent 0.1, 0.05, and 0.01 levels, respectively. ENVD – environmental responsibility disclosures; SOCD – social responsibility disclosures; GOVD – governance disclosures. NPM is dependent variable. N denotes the number of companies.

Source: Own work.

5. Conclusion

This study aims to examine the impact of ESG disclosure on financial performance, with a focus on the moderating effect of internationalisation on non-financial companies in the UK's largest economies. The results show some fascinating insights. To begin with, the disclosure of environmental responsibility has a tendency to weigh heavily on business profits. Such disclosure frequently necessitates an effort to adopt environmentally friendly practices and technologies (Park *et al.*, 2017).

This results in higher costs and a longer return on investment for businesses investing in more modern and less polluting technologies, waste reduction measures, or sustainable resource reduction measures. In the short term, these expenses may negatively impact an organization's financial performance (Alareeni and Hamdan, 2020). However, we hope that these policies are maintained because, in the long run, ESG disclosure practices may provide a level of assurance of business continuity through the achievement of optimal financial performance that satisfies global climate change requirements.

Second, a thorough disclosure of governance has a negative effect on an organization's financial success. A thorough governance disclosure may highlight the shortcomings or issues with the company's governance system. The implementation of new policies, procedures, and technologies is frequently necessary to improve governance practices, which results in significant costs that ultimately impact the company's profits.

Although effective governance disclosure may increase investor confidence, enhance decision-making, and promote sustainability over the long run, companies with poor governance may elicit negative investor reactions, which could impact stock market prices or the company's overall financial performance. Long-term stability and reputation may be strengthened by improving governance practices, but short-term performance may be impacted by the initial costs associated with these changes (Alareeni and Hamdan, 2020).

Overall, this study contradicts the theory of parties prenantes, which holds that business responsibility practices do not always result in better relations with parties prenantes, at least not in the short term, even though they may be in line with their interests over an extended period of time. The ESG regulations are not yet mandatory in developing nations since they do not fully support businesses that implement ESG, particularly in the short term.

However, the impact of ESG implementation in developing nations can be mitigated by internationalisation, or expansion, towards both countries that prioritise ESG more (such as the United States and the European Union) and those that do not. In addition to the effect of market expansion, rates of change also play a critical role in mitigating the negative effects of ESG disclosure practices. International expansion gives businesses the chance to reach a wider audience and enter new markets, which is especially beneficial when the local market is saturated or growth prospects are limited (Mutascu and Murgea, 2020).

Engaging in activities across multiple countries may help reduce the risks associated with economic downturns in some areas. A more consistent and predictable financial performance may result from diversifying revenue streams across several markets. By giving businesses the chance to expand their production and distribution capabilities, internationalisation may encourage economies of scale by enabling them to meet the demands of a wider range of customers.

The increase in production volume generally lowers the cost per unit, improving the financial performance of export-oriented businesses worldwide. Therefore, even though ESG practices and disclosures negatively impact businesses' financial performance, internationalisation has a greater ability to achieve this effect than companies that solely focus on domestic operations.

It is anticipated that this study will give businesses insight into how prepared they are and how they should anticipate being for the implementation of ESG in their operational activities. Generally speaking, implementing new policies, procedures, and technologies is part of applying the ESG. Long-term stability and reputation may be improved, but short-term financial performance may be impacted by the initial costs associated with these changes.

This study has several limitations, including in terms of data collection, as not all businesses provide comprehensive durability reports or other detailed reports for each year of the study period. Furthermore, the use of financial performance is limited to the short term, meaning that the results do not allow for the evaluation of the impact of ESG disclosure on long-term financial performance.

References:

- Alareeni, B.A., Hamdan, A. 2020. ESG impact on performance of US SandP 500-listed firms. *Corporate Governance: The International Journal of Business in Society*, 20(7), 1409-1428.
- Anvari-Moghaddam, A., Monsef, H., Rahimi-Kian, A. 2014. Optimal smart home energy management considering energy saving and a comfortable lifestyle. *IEEE Transactions on Smart Grid*, 6(1), 324-332.
- Bahadori, N., Kaymak, T., Seraj, M. 2021. Environmental, social, and governance factors in emerging markets: The impact on firm performance. *Business Strategy and Development*, 4(4), 411-422.
- Buallay, A. 2019. Between cost and value: Investigating the effects of sustainability reporting on a firm's performance. *Journal of applied accounting research*, 20(4), 481-496.
- Busru, S.A., Fahad, P. 2023. The role of corporate governance in ensuring the quality of earnings: Empirical evidence from the emerging market. *Corporate Governance and Sustainability Review*, 7(1), 21-33.
- Carnini Pulino, S., Ciaburri, M., Magnanelli, B.S., Nasta, L. 2022. Does ESG disclosure influence firm performance? *Sustainability*, 14(13), 7595.
- Chainual, R., Thavorn, J., Phayaphrom, B., Klongthong, W. 2024. Environmental, Social, and Corporate Governance (ESG) for Thai SMEs Sustainability. *International Conference on Economics, Business and Interdisciplinary Studies (ICEBIS 2024)*.
- Contractor, F.J. 2012. Why do multinational firms exist? A theory note about the effect of multinational expansion on performance and recent methodological critiques. *Global Strategy Journal*, 2(4), 318-331.
- Cristea, M., Noja, G.G., Thalassinou, E., Cîrciumaru, D., Ponea, C.Ş., Durău, C.C. 2022. Environmental, social and governance credentials of agricultural companies—the interplay with company size. *Resources*, 11(3), 30.
- Egorova, A.A., Grishunin, S.V., Karminsky, A.M. 2022. The Impact of ESG factors on the performance of Information Technology Companies. *Procedia Computer Science*, 199, 339-345.
- Elmghamez, I.K., Nwachukwu, J., Ntim, C.G. 2024. ESG disclosure and financial performance of multinational enterprises: The moderating effect of board standing committees. *International Journal of Finance and Economics*, 29(3), 3593-3638.

- Freeman, R.B. 1984. Longitudinal analyses of the effects of trade unions. *Journal of labor Economics*, 2(1), 1-26.
- Gaur, R., Singh, R., Gupta, M., Gaur, M.K. 2010. *Aureobasidium pullulans*, an economically important polymorphic yeast with special reference to pullulan. *African journal of biotechnology*, 9(47), 7989-7997.
- Grima, S., Maditinos, D., Noja, G.G., Stankevičienė, J., Tarczynska-Luniewska, M., Thalassinou, E. (Eds.). 2024. *Exploring ESG Challenges and Opportunities: Navigating Towards a Better Future*. Emerald Publishing Limited.
- Grünig, R., Morschett, D. 2016. Developing the Strategy and the Project Plans. In : *Developing International Strategies* (pp. 125-134). Berlin, Heidelberg: Springer Berlin Heidelberg.
- Habib, A.M., Mourad, N. 2024. The influence of environmental, social, and governance (ESG) practices on US firms' performance: Evidence from the coronavirus crisis. *Journal of the Knowledge Economy*, 15(1), 2549-2570.
- Huang, W.J., Wang, M., Kondev, F.G., Audi, G., Naimi, S. 2021. The AME 2020 atomic mass evaluation (I). Evaluation of input data, and adjustment procedures. *Chinese Physics C*, 45(3), 030002.
- Le Thi Kim, N., Duvernay, D., Le Thanh, H. 2021. Determinants of financial performance of listed firms manufacturing food products in Vietnam: regression analysis and Blinder–Oaxaca decomposition analysis. *Journal of Economics and Development*, 23(3), 267-283.
- Li, J.N., Xie, C.C., Li, C.Q., Zhang, G.F., Tang, H., Jin, C.N., ..., Niu, L.C. 2022. Efficacy and safety of transcutaneous auricular vagus nerve stimulation combined with conventional rehabilitation training in acute stroke patients: a randomized controlled trial conducted for 1 year involving 60 patients. *Neural regeneration research*, 17(8), 1809-1813.
- Lian, Z., Sun, H., Sun, L., Chen, K., Xu, M., Wang, K., ..., Tao, J. 2023. Mer 2023: Multi-label learning, modality robustness, and semi-supervised learning. In : *Proceedings of the 31st ACM international conference on multimedia* (pp. 9610-9614).
- Lubis, M.F.F., Rokhim, R. 2021. The effect of environmental, social, and governance (ESG) disclosure and competitive advantage on companies performance as an implementation of sustainable economic growth in Indonesia for period of 2015-2019. In : *IOP Conference Series: Earth and Environmental Science* (Vol. 940, No. 1, p. 012059). IOP Publishing.
- Meiryani, M., Shi-Ming, H., Warganegara, D.L., Ariefianto, M.D., Teresa, V., Oktavanie, H. 2023. The effect of industrial type, environmental performance and leverage on carbon emission disclosure: Evidence from Indonesian LQ45 companies. *International Journal of Energy Economics and Policy*, 13(4), 622.
- Mulyono, K.B., Rahman, M.F., Daud, N.M. 2025. Unpacking Student Entrepreneurial Success: The Strategic Role of Entrepreneurial Character and Organizational Culture. *Jurnal Pendidikan Progresif*, 15(3), 1497-1517.
- Necib, A., Jarboui, A. 2025. Evidence of the Impact of ESG Disclosures on Financial Performance Comes from Companies Listed on the London Stock Exchange's FTSE100. *International Journal of Economics and Business Administration (IJEBA)*, 13(2), 204-216.
- Necib, A., Feidi, A., Jarboui, A. 2025. The Impact of Business Risk, Intellectual Capital, and Institutional Ownership on the Value of the Firm. *International Journal of Economics and Business Administration (IJEBA)*, 13(1), 3-19.

- Noja, G.G., Cristea, M., Thalassinou, E., Kadłubek, M. 2021. Interlinkages between government resources management, environmental support, and good public governance. *Advanced Insights from the European Union. Resources*, 10(5), 41.
- Oware, K.M., Mallikarjunappa, T. 2023. Financial performance and gender diversity: The moderating and mediating effect of CSR disclosure and expenditure of listed firms in India. *Vision*, 27(2), 243-255.
- Pagkalou, F.I., Thalassinou, E.I., Liapis, K.I. 2025. Comparative Analysis of CSR and ESG Actions in Greece: A Study Using Artificial Neural Networks and Machine-learning Techniques. In *Green wealth: Navigating towards a sustainable future* (pp. 273-293). Emerald Publishing Limited.
- Plastun, O.L., Makarenko, I.O., Khomutenko, L.I., Osetrova, O., Shcherbakov, P. 2020. SDGs and ESG disclosure regulation: is there an impact? Evidence from Top-50 world economies. *Problems and Perspectives in Management*, 18(2), 231-245. doi:10.21511/ppm.18(2).2020.20.
- Platonova, E., Asutay, M., Dixon, R., Mohammad, S. 2018. The impact of corporate social responsibility disclosure on financial performance: Evidence from the GCC Islamic banking sector. *Journal of business ethics*, 151(2), 451-471.
- Ratajczak, P., Mikołajewicz, G. 2021. The impact of environmental, social and corporate governance responsibility on the cost of short-and long-term debt. *Economics and Business Review*, 7(2), 74-96.
- Rohendi, H., Ghazali, I., Ratmono, D. 2024. Environmental, social, and governance (ESG) disclosure and firm value: the role of competitive advantage as a mediator. *Cogent Business and Management*, 11(1), 2297446.
- Saygili, E., Arslan, S., Birkan, A.O. 2022. ESG practices and corporate financial performance: Evidence from Borsa Istanbul. *Borsa Istanbul Review*, 22(3), 525-533.
- Scachetti, G.C., Forato, J., Claro, I.M., Hua, X., Salgado, B.B., Vieira, A., ..., de Souza, W. M. 2025. Re-emergence of Oropouche virus between 2023 and 2024 in Brazil: an observational epidemiological study. *The Lancet Infectious Diseases*, 25(2), 166-175.
- Soesetio, Y., Anggraeni, C.N., Rudhiningtyas, D.A., Fuad, M. 2023. Corporate governance implementation on earnings management practices: Firm size as moderation. *Jurnal Ekonomi Modernisasi*, 19(2), 112-127.
- Sudirman, A., Alaydrus, S., Rosmayati, S., Syamsuriansyah, S., Nugroho, L., Arifudin, O., ..., Rijal, K. 2020. Perilaku konsumen dan perkembangannya di era digital. *Widina Bhakti Persada*, Bandung, Indonesia
- Teoh, S.E., Masuda, Y., Tan, D.J.H., Liu, N., Morrison, L.J., Ong, M.E.H., ..., Ho, A.F.W. 2021. Impact of the COVID-19 pandemic on the epidemiology of out-of-hospital cardiac arrest: a systematic review and meta-analysis. *Annals of intensive care*, 11(1), 169.
- Veeravel, V., Sadharma, E.K.S., Kamaiah, B. 2024. Do ESG disclosures lead to superior firm performance? A method of moments panel quantile regression approach. *Corporate Social Responsibility and Environmental Management*, 31(1), 741-754.
- Velte, P., Stawinoga, M. 2017. Empirical research on corporate social responsibility assurance (CSRA): A literature review. *Journal of Business Economics*, 87(8), 1017-1066.
- Wasiuzzaman, S., Subramaniam, V. 2023. Board gender diversity and environmental, social and governance (ESG) disclosure: is it different for developed and developing nations? *Corporate Social Responsibility and Environmental Management*, 30(5), 2145-2165.

Yang, W.S., Park, B.W., Jung, E.H., Jeon, N.J., Kim, Y.C., Lee, D.U., ..., Seok, S.I. 2017. Iodide management in formamidinium-lead-halide-based perovskite layers for efficient solar cells. *Science*, 356(6345), 1376-1379.

Appendix: ESG items and sub-items used in their measurement

Disclosures	Variable Type
ENVIRONMENTAL DISCLOSURES	
EDS – Environmental Disclosure Score - EDS1 Reused and recycled materials - EDS2 Energy consumption and reductions - EDS3 Water recycled and reused - EDS4 Protection of biodiversity - EDS5 Greenhouse gas (GHG) emissions intensity - EDS6 Reductions of GHG emissions - EDS7 Emissions of ozone-depleting and other hazardous air pollutants - EDS8 Effluents and waste - EDS9 Recycled products - EDS10 Recycled packaging products - EDS11 Compliance with environmental regulations - EDS12 Environmental impacts of transporting products - EDS13 Environmental protection expenditures and investments - EDS14 Supplier environmental assessment - EDS15 Environmental grievance mechanisms	continuous between 0 and 1
SOCIAL DISCLOSURES	
SP – Stakeholder Policy - SP1 The protection of the rights of stakeholders. - SP2 Compensation is offered in cases of violation of the stakeholder rights. - SP3 Stakeholder policies that are released on the company's website. - SP4 Mechanisms where stakeholders inform the CG or audit committee in ethical breaches. - SP5 Policy on conflict of interest among stakeholders.	continuous between 0 and 1
SPM – Stakeholder Participation in Management - SPM1 Supporting the participation of stakeholders, primarily employees, in management. - SPM2 Stakeholders express their opinions on the significant decisions affecting them.	continuous between 0 and 1
HRP – Human Resources Policy - HRP1 Employment policies and career plans that provide equal opportunities. - HRP2 Existence of written employment criteria. - HRP3 Fairness in staff training programs and meetings. - HRP4 Events in which employees or their representatives express their opinions on decisions. - HRP5 Description of job, performance, and award criteria. - HRP6 Measures to prevent discrimination. - HRP7 The rights of association and collective bargaining. - HRP8 Health and safety measures are taken in the working environment.	continuous between 0 and 1
RCS – Relations with Customers and Suppliers - RCS1 Customer satisfaction with the sale and marketing of goods and services. - RCS2 Customer purchases are handled quickly and efficiently. - RCS3 Quality standards for goods, services, and guarantees provided. - RCS4 A specific quality guarantee is provided. - RCS5 Confidentiality of trade secrets of customers and suppliers.	continuous between 0 and 1
ERSR – Ethical Rules and Social Responsibility - ERSR1 Ethical rules are released on the official website to the public. - ERSR2 Social responsibility and compliance with regulations and ethical rules.	continuous between 0

	and 1
GOVERNANCE DISCLOSURES	
ESR – Exercise of Shareholder Rights - ESR1 Investor relations department. - ESR2 Update reports and disclosures on the corporate website.	continuous between 0 and 1
SIR – Shareholder’s Information Right - SIR1 Shareholder’s right to request information and special audits.	binary
GAR – General Assembly Right - GAR1 The GA information shall be provided on the website three weeks before the meeting. - GAR2 Submission of each proposal under a separate title on the agenda of the general assembly. - GAR3 Shareholders’ participation in the GA shall be subject to minimum costs. - GAR4 Performance of the chairman in the GA. - GAR5 Shareholders are given fair opportunities to express their views and to raise questions. - GAR6 Related party transactions are included on the GA agenda. - GAR7 The list of insiders is released on the GA agenda. - GAR8 The presence of the BoD, the officers responsible for the financial statements and the auditors. - GAR9 Issues related to corporate transactions on the GA agenda. - GAR10 Approval of the donation and contribution policy in the general assembly. - GAR11 The openness of GA to the public including to stakeholders and the media.	continuous between 0 and 1
VR – Voting Rights - VR1 A chance to exercise the right of shareholders to vote, including cross-border voting. - VR2 Avoidance of voting privileges. - VR3 Avoidance of the right to vote resulting from cross-ownership.	continuous between 0 and 1
MR – Minority Rights - MR1 Maximum diligence paid in the exercise of minority rights. - MR2 Scope of minority rights for shareholders holding less than one-twentieth of the capital.	continuous between 0 and 1
DR – Dividend Rights - DR1 Consistent dividend payout strategy presented at the GA and published on the website. - DR2 Forward-looking information related to the distribution of dividends. - DR3 Reason for not paying dividends and information on the use of the dividends. - DR4 A balanced dividend distribution policy is followed.	continuous between 0 and 1
TS – Transfer of Shares - TS1 Free transfer of shares.	binary
CW – Corporate Website - CW1 Release of the relevant legislation and information - CW2 Shareholding structure, names, number, and share ratio of the corporation. - CW3 Notifications of financial statements and disclosures - CW4 Information in other foreign languages	continuous between 0 and 1
AR – Annual Report - AR1 A detailed annual report issued by the BoD. - AR2 Detailed information on corporate governance is included in the annual report.	continuous between 0 and 1
BDF – Board of Directors’ Functions - BDF1 Strategic decisions and rational risk management publicly disclosed by the BoD - BDF2 Strategic objectives, identified by BoD, and the performance audit of the management.	continuous between 0 and 1
BDA – Board of Directors Activities - BDA1 Transparency, accountability, and responsibility of BoD operations. - BDA2 The duties and authorities of the members of the board are announced in the annual report.	continuous between 0 and 1

- BDA3 The internal control system. - BDA4 Annual review and disclosure of the efficiency of the internal control system by BoD. - BDA5 Separation of the board chairman and chief executive/general manager. - BDA6 Disclosure of the duality of CEO. - BDA7 The BoD's communication activities between the corporation and the shareholders. - BDA8 Insurance above 25% of the capital for damage caused by BoD.	
BDS – Board of Directors Structure - BDS1 Minimum number of five members on the BoD - BDS2 The majority of members are non-executive members. - BDS3 Existence of independent members among non-executive members. - BDS4 Minimum one-third of the board consists of independent members of the board. - BDS5 The term of office of the independent members shall be up to three years. - BDS6 Independent members meet the legal criteria. - BDS7 Evaluation of the applicants for independent membership by the nomination committee. - BDS8 Notification of independence revokes. - BDS9 The number of female members is more than 25%. - BDS10 At least one of the independent members responsible for the audit has financial expertise.	continuous between 0 and 1
BDM – Board of Directors Meetings - BDM1 Attendance and declaration of opinions of members at the BoD meetings. - BDM2 Agenda of the BoD meeting. - BDM3 Written opinions of members who were unable to attend the BoD meetings. - BDM4 Each member on the board has one right to vote. - BDM5 The written proceedings of the meeting are available online. - BDM6 Attendance of non-executive members. - BDM7 Disclosure of inform	continuous between 0 and 1
BDC – Board of Directors Committees - BDC1 Construction of legal committees of the BoD. - BDC2 Disclosures of duties, working principles, and members of committees. - BDC3 Disclosures relating to the structure of the committees. - BDC4 The chief executive / general manager shall have no duties in the committees. - BDC5 The members of the board do not have duties in more than one committee. - BDC6 Resources provided by the BoD to support committees in carrying out their duties. - BDC7 Disclosures of consultancy services are set out in the annual report. - BDC8 Written records of committees. - BDC9 The audit committee shall follow the legal criteria. - BDC10 The corporate governance committee shall comply with the legal criteria. - BDC11 The nomination committee shall follow the legal criteria. - BDC12 The committee of early detection of risk shall follow the legal criteria. - BDC13 The remuneration committee shall follow the legal criteria.	continuous between 0 and 1
BDR – Board of Directors' Remuneration - BDR1 Performance evaluation of the BoD. - BDR2 Principles on the remuneration of members of the BoD and executives. - BDR3 Remuneration of independent members of the BoD which ensures their independence. - BDR4 Loans and credits should not be provided to members of the BoD or executives. - BDR5 The remuneration of board members and executives shall be disclosed individually in annual reports.	continuous between 0 and 1