

# EXAMINING THE DRIVERS OF ESG ADOPTION: EMPIRICAL FINDINGS FROM A DEVELOPING MARKET

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## Abstract

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The global interest in environmental, social, and governance (ESG) issues has increased significantly among various stakeholders. This trend encourages entrepreneurs to integrate ESG concerns into their business operations. According to the research findings of Dicuonzo et al. (2022), they have spurred enterprises to invest in innovation to enhance a positive effect on sustainability. This paper aims to investigate the factors influencing ESG pursuit in an emerging market, using SPSS Statistics 24.0 to test exploratory factor analysis (EFA). The study focuses on listed companies subject to more stringent accounting standards and policies. The empirical findings reveal that board structure, board gender diversity, and ESG knowledge are the top three factors that impact ESG pursuit. Moreover, the study identifies leadership and enterprise size as additional factors that affect ESG pursuit. This research provides practical insights to assist entrepreneurs in enhancing ESG pursuit in an emerging market.

**Keywords:** ESG Pursuit, Emerging Market, Vietnamese-Listed Enterprises, Impacting Factors

**Authors' individual contribution:** Conceptualization — T.T.H.N.; Methodology — T.T.H.N.; Investigation — N.H.T.; Resources — N.H.T.; Writing — N.H.T.; Supervision — N.H.T.

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## 1. INTRODUCTION

Environmental, social, and governance (ESG) factors have become increasingly mainstream and are now widely recognised as essential to business operations. ESG encompasses policies and practices that reflect a commitment to employees, customers, vendors, and the wider business environment. In response to growing demand from global investors and stakeholders, enterprises are increasingly focused on sustainable development. The threat of climate change and environmental degradation have heightened interest in sustainability issues, and social pressure is mounting for companies to adopt more responsible production policies (Kotze et al., 2010; Ying & Xin-Gang, 2021). As a result, businesses are innovating their models to pursue ESG objectives, using resources more efficiently and reducing their environmental impact (Maffei et al., 2019).

ESG investing has become increasingly prevalent in recent times. No longer a buzzword, responsible investment has emerged as a crucial consideration in investment activities. A growing number of investors are placing significant weight on ESG criteria, prompting enterprises to view accountable investing as a critical strategy for building resilient infrastructure and preparing for potential disruptions. It is a matter of managing resources, reducing waste, conserving energy, and investing in industries that contribute to combating climate change. Enterprises must be prepared to navigate unforeseen circumstances and disruptive business operations.

Given the growing concern of stakeholders towards sustainable development issues, empirical research on ESG issues in emerging economies is being encouraged. In this regard, there is a pressing need for empirical research on the pursuit of ESG by enterprises and the factors that influence it.

In the global capital market, ESG has become a critical criterion that prospective investors consider before investing. As a result, some stock markets have enacted regulations that require listed companies to disclose ESG information.

In Vietnam, many enterprises are just beginning their ESG journey. According to PricewaterhouseCoopers (PwC, 2022), there is a significant gap between expectations and actions, and further improvement is needed in their ESG practices. While it is commendable that 80% of enterprises have committed to or are planning to practice ESG within the next 2–4 years, more than talk is needed, and ESG seems overwhelming for many Vietnamese enterprises. A key barrier for Vietnamese enterprises is a need for more understanding of the data required for ESG reports. According to PwC's survey, 71% of Vietnamese enterprises have either not planned for ESG disclosure or have yet to consider the need for ESG implications. Moreover, the survey finds that actual reports are not linked to data assessment. For example, while more than half (53%) of Vietnamese enterprise respondents confirm their evaluation of external reporting's required data, only 30% have taken action on ESG disclosure. Therefore, there is an urgent need for the government to guide ESG disclosure in Vietnam (PwC, 2022). Based on the results of PwC's survey, we can see that ESG disclosure in Vietnam remains limited, even in listed companies with stricter about disclosing information. This study endeavours to enhance our comprehension of the determinants that impact adopting ESG practices in Vietnam.

The structure of this paper is as follows. Section 2 presents the literature review and the development of hypotheses. Section 3 outlines the research method and methodology employed. Sections 4 and 5 analyse the primary findings and engage in further discussions. Lastly, Section 6 offers concluding remarks.

## 2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

The authors examine the various impacts of ESG pursuit in Vietnam, including innovation, ESG knowledge, leadership, enterprise size, board gender diversity, and board structure.

### 2.1. Innovation

Currently, organisations globally are confronted with the pressing challenge of achieving a harmonious equilibrium between the productive consumption and ecological preservation. To deal with this problem, sustainable development is considered because it targets low emission, energy saving, and material recycling. Enterprises should implement green innovation in their daily activities to achieve their objectives. On the one hand, as enterprises strive for innovation, they must also navigate the ever-increasing stringency of environmental legislation and regulations. On the other hand, the pursuit of innovation enables them to enhance operational efficiency and capitalise on new business prospects, such as meeting the demands of environmentally conscious customers (Carayannis

et al., 2015). As a result, ESG pursuit and innovation always have a positive relationship. In particular, enterprises should combine their sustainable targets with their competitive advantages. For this reason, ESG sustainability and other objectives of enterprises can be reached effectively by enhancing innovation.

In 2020, based on a sample collected from 340 Chinese enterprises, Zhang et al. (2020) found a positive relationship between green innovation and environmental performance. Later, in 2022, through a survey of listed companies, concerning the impact of eco-innovation on ESG codes, Dicuonzo et al. (2022) also stated a positive correlation existed between them. Their findings suggest that enterprises can improve their ESG performance by continuously increasing their level of innovation.

*H1: The innovation positively impacts ESG pursuit.*

### 2.2. Knowledge of ESG

Due to the close connection between strategic, operating, and management activity and the nature, timing, and extent of the information reported to stakeholders, excellent statements help enterprises reduce information asymmetry. When disclosing ESG performance, enterprises also enable accountability for ESG performance (Alrazi et al., 2015). In a recent PwC survey, global respondents responded that they felt embarrassed about ESG standards and regulations. This problem was considered the most challenging and frustrating aspect of their ESG announcing movement. In Vietnam, this rate was high, with 61% of surveyors answering that lack of knowledge is the critical barrier preventing them from committing to ESG (PwC, 2022).

*H2: The knowledge of ESG positively impacts ESG pursuit.*

### 2.3. Leadership

When enterprises want to ensure ESG is a priority, their boards will play a vital role. Their role differs flexibly due to differences in industry field, company size, growth trajectory, and strategy. Boards can help allocate appropriate resources by their guide management. In addition, their roles also warrant consideration when determining the most appropriate governance structure to oversee ESG matters. For example, in some positions in enterprises as the ESG leader or chief sustainability officer (CSO), their leadership role is to help drive and implement ESG initiatives. PwC's (2022) survey provided evidence showing that authorised CSOs could create a substantial impact because they could catch up with the association of all ESG matters. Moreover, they still follow the sight of their enterprises' sustainability mission. When corporate boards prioritise ESG considerations, they will implement an impactful ESG strategy. So, it is essential for them to understand ESG topics well to carry out their governance and supervise duties. In PwC's survey, around one-third of respondents (29%) indicated that board engagement in ESG instils confidence in their Board's ESG competencies.

*H3: The leadership positively impacts ESG pursuit.*

## 2.4. Size of enterprise

As usual, large enterprises have a more significant social impact than small ones. Under colonial and political pressure, and great stakeholders' scrutiny, large enterprises are likely to demonstrate their commitment to ESG disclosure (Alkayed & Omar, 2022; Valls Martínez et al., 2019; Zahid et al., 2020). In addition, they also have more significant financial and human resources to dedicate to social and environmental matters. As a result, they are anticipated to be notably inclined to furnish ESG disclosures. Like the prior study by Dam and Scholtens (2012), when contemplating socially responsible contribution, they found that smaller enterprises exhibit comparatively lower enthusiasm than their larger counterparts regarding community contribution.

Recently, according to PwC's report in 2022 in Vietnam, 46% of respondents indicated that company size was a barrier preventing them from committing to ESG. They responded with: "no plan to make commitments in 2-4 years" to the question "Choose the statement that best describes the current status of your organisation's ESG commitment" (PwC, 2022).

*H4: The size of the enterprise positively impacts ESG pursuit.*

## 2.5. Board gender diversity

Stakeholder theory can help us understand the relationship between corporate governance mechanisms and ESG disclosure. It depends on the critical role of the board, which is described as controlling managers' behaviours and fairly addressing the interests of diverse stakeholders. Board members guide the implementation of acceptable disclosure strategies and policies encompassing both financial and non-financial aspects (de Villiers & Dimes, 2021; Michelon & Parbonetti, 2012; Valls Martínez et al., 2019).

However, their capabilities, skills, experiences, and perspectives are crucial factors that impact the effectiveness and efficiency of their monitoring and accountability tasks (de Villiers & Dimes, 2021). So, enterprises should have an adequate corporate governance structure regarding the members' diversity. There are different characteristics, such as personalities and socio-cultural backgrounds, between men and women. They also carry out different leadership styles based on their additional capabilities and expectations. So, if the enterprise has adequate board members, it can enhance the discussions and improve the decision-making

process within the board (Fernandes & Barbosa, 2022). In prior research, García Martín and Herrero (2020) stated that the gender diversity of the board of directors helps promote sustainable environmental initiatives. Their finding supported the opinion that women can help to enhance concerns about environmental issues based on their knowledge, talent, and backgrounds. In recent research, Nicolò et al. (2022) stated that the participation of women on the board can help promote the transparent disclosure of ESG matters. Furthermore, their presence could enhance political and public decision-making, especially regarding ESG issues.

*H5: The board's gender diversity positively impacts ESG pursuit.*

## 2.6. Board structure

Board directors legally take responsibility for monitoring and managing operational activities. So, high independence level of directors is good for doing their tasks, as they face less internal pressure from board members. Typically, independent directors can perform better in their advisory role by bringing quality suggestions based on their expertise. In addition, they can hold more power over internal ones so that they can comply strictly with regulations and laws. As a result, they are more cautious about environmental performance and follow environmental protection strategies (Fernandes & Barbosa, 2022; Kamarudin et al., 2022; Michelon & Parbonetti, 2012; Naciti, 2019).

Lately, when surveying emerging East Asian economies, Nguyen and Thanh (2022) found that a superior corporate board had a positive impact on ESG performance. The board structure was considered, including the number of members, the level of board independence, and the close relationship between the CEO and board chairperson. It could enhance environmental performance effectively and improve sustainable development.

*H6: The board structure positively impacts ESG pursuit.*

## 3. RESEARCH METHODOLOGY

### 3.1. The development of research model

The study tests the association between six independent variables and dependent variable ESG pursuit (*ESGP*) based on the following model:

$$ESGP_i = \alpha + \beta_1 INO_i + \beta_2 KNO_i + \beta_3 LEAD_i + \beta_4 SIZE_i + \beta_5 GEN_i + \beta_6 STR_i + \varepsilon_i \quad (1)$$

where,

*ESGP<sub>i</sub>* = stands for ESG pursuit factors including:

- *ESGP<sub>1</sub>*: have implemented ESG disclosures;
- *ESGP<sub>2</sub>*: have made ESG commitment and detailed plan;
- *ESGP<sub>3</sub>*: in the planning phase for the next 1-2 years;
- *ESGP<sub>4</sub>*: do not have the plan to make ESG commitment in the next 1-2 years;

$\alpha$  = constant term;

$\beta_i$  = coefficient of variables;

$\varepsilon_i$  = residual.

The independent variables included *INO*, *KNO*, *LEAD*, *SIZE*, *GEN*, and *STR*, which stand for innovation, knowledge of ESG, leadership, size of the enterprise, board gender diversity, and board structure. They are hypothesised to have an associated impact on the ESG pursuit of Vietnamese-listed enterprises.

Their scales are described in detail below:

1. *INO* stands for innovation factors, which include:

- *INO*<sub>1</sub>: the process innovation;
- *INO*<sub>2</sub>: the product innovation;
- *INO*<sub>3</sub>: the managerial innovation;
- *INO*<sub>4</sub>: R&D expenditure;
- *INO*<sub>5</sub>: number of patents;
- *INO*<sub>6</sub>: number of patent applications.

2. *KNO* stands for knowledge of ESG factors, which include:

- *KNO*<sub>1</sub>: boards' knowledge of ESG;
- *KNO*<sub>2</sub>: owners' knowledge of ESG;
- *KNO*<sub>3</sub>: C-suites' knowledge of ESG;
- *KNO*<sub>4</sub>: managers' knowledge of ESG;
- *KNO*<sub>5</sub>: below managers' knowledge of ESG.

3. *LEAD* stands for the leadership factors, which include:

- *LEAD*<sub>1</sub>: boards' consideration about ESG risk;
- *LEAD*<sub>2</sub>: boards' consideration about ESG opportunities;
- *LEAD*<sub>3</sub>: boards' consideration about ESG assurance;
- *LEAD*<sub>4</sub>: boards' consideration about the reliability of ESG information;
- *LEAD*<sub>5</sub>: boards' consideration about ESG standards and frameworks.

4. *SIZE* stands for the size of enterprise factors, which include:

- *SIZE*<sub>1</sub>: number of employees;
- *SIZE*<sub>2</sub>: number of departments;
- *SIZE*<sub>3</sub>: number of branches;
- *SIZE*<sub>4</sub>: market share;
- *SIZE*<sub>5</sub>: ranking position in the market;
- *SIZE*<sub>6</sub>: total assets.

5. *GEN* stands for the board gender diversity factors, which include:

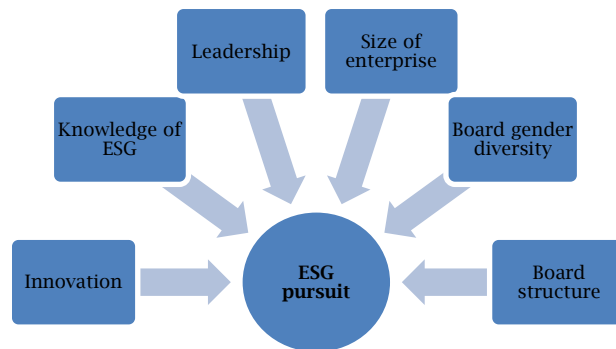
- *GEN*<sub>1</sub>: percentage of women owners;
- *GEN*<sub>2</sub>: percentage of women on boards;
- *GEN*<sub>3</sub>: percentage of women on C-suites;
- *GEN*<sub>4</sub>: percentage of women managers.

6. *STR* represents the board structure factors, which include:

- *STR*<sub>1</sub>: the number of board members;
- *STR*<sub>2</sub>: the level of board independence;
- *STR*<sub>3</sub>: the close relationship between the CEO and board chairperson;
- *STR*<sub>4</sub>: the number of foreign board members;
- *STR*<sub>5</sub>: the number of government board members.

Green's (1991) suggestion for determining the sample size (*N*) in multiple regression is  $N \geq 50 + 8p$ , where *p* signifies the number of independent variables. The minimum required sample size for the current study, encompassing six independent variables, was 98. Five hundred questionnaires were distributed to chief executive officers (CEOs), chief financial officers (CFOs), chief accountants, and managers of other operative departments in Vietnamese-listed companies. Of these, 350 credible answers were collected during this investigation time, leading to a response rate of 70%. The questionnaire employed a 5-point Likert scale with the following response options: 1 – strongly disagree, 2 – disagree, 3 – neither agree nor disagree, 4 – agree, and 5 – strongly agree. The research model, theoretical framework, and hypothesis testing were evaluated using exploratory factor analysis (EFA) methods in SPSS Statistics 24.0.

Figure 1. Overview of the research model



This exploratory research examines the factors that impact ESG pursuit in Vietnamese-listed enterprises. This study employed a quantitative survey instrument to assemble data samples.

### 3.2. Development of measurements

The questionnaire items were developed through an extensive review of relevant literature and subsequently organised into three sections. The initial section aimed to collect information from participants, including CEOs, CFOs, chief accountants, and managers from other operative departments. The second section focused on gathering data about listed enterprises, while the third section focused on examining ESG pursuit's

impact. Before administering the final formal questionnaires, a preliminary draft underwent review by several scholars and experts in questionnaire development, who provided valuable feedback on aspects such as wording, content, appropriateness, coverage of ESG pursuit-related dimensions, simplicity, and presentation. After incorporating their feedback, the survey was distributed to targeted respondents working in Vietnam's listed enterprises, encompassing all items related to the model constructs.

### 4. RESULTS

Employing SPSS Statistics 24.0 to conduct EFA, the research findings are presented here. In this

study, all scales exhibited Cronbach's alpha values exceeding 0.6, ensuring their appropriateness for examination. These scales include 30 variables, comprising 26 independent variables and four dependent variables.

**Table 1.** The outcome of the reliability and validity assessment

Name of scale	Corrected item-total correlation	Cronbach's alpha (number of observed variables)
Innovation (INO)	0.457-0.590	0.755 (05)
Knowledge of ESG (KNO)	0.369-0.505	0.695 (05)
Leadership (LEAD)	0.590-0.636	0.781 (03)
Size of the enterprise (SIZE)	0.546-0.732	0.834 (04)
Board gender diversity (GEN)	0.591-0.677	0.810 (04)
Board structure (STR)	0.671-0.765	0.891 (05)
ESG pursuit (ESGP)	0.732-0.849	0.908 (04)

The test results presented in Table 2 show that the Kaiser-Meyer-Olkin (KMO) measure is 0.869,

indicating the adequacy of sampling for the factor analysis ( $0.5 < KMO = 0.869 < 1$ ). Additionally, Bartlett's test yielded a statistically significant result with a p-value  $< 0.05$ , affirming the suitability of applying the EFA model to assess the scale values of the independent variables for this research.

**Table 2.** KMO and Bartlett's test

Kaiser-Meyer-Olkin measure of sampling adequacy	0.869	
Bartlett's test of sphericity	3545.106	2281.512
	253	231
	0.000	0.000

The analytical findings in Table 3 reveal that the observed variables accounted for a substantial 66.78% ( $> 50\%$ ) of the variance in the factors. Consequently, the suitability of the EFA model was confirmed, leading to the acceptance of the scale.

To ensure the reliability of the six groups of independent variables' factors, a factor analysis test was conducted using the 23 observed variables. The analysis results are presented in Table 4, which shows the matrix of rotational factors.

**Table 3.** Total variance explained

Component	Initial eigenvalues			Extraction sums of squared loadings			Rotation sums of squared loadings		
	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %
1-STR	6.790	29.521	29.521	6.790	29.521	29.521	3.706	16.115	16.115
2-SIZE	2.770	12.045	41.566	2.770	12.045	41.566	2.747	11.942	28.057
3-INO	2.067	8.988	50.555	2.067	8.988	50.555	2.577	11.206	39.264
4-GEN	1.462	6.356	56.911	1.462	6.356	56.911	2.479	10.779	50.042
5-LEAD	1.242	5.398	62.309	1.242	5.398	62.309	2.196	9.546	59.588
6-KNO	1.028	4.471	66.780	1.028	4.471	66.780	1.654	7.192	66.780

Note: Extraction method: Principal component analysis.

**Table 4.** Factor rotation matrix <sup>a</sup>

N	Variables	Component					
		1-STR	2-SIZE	3-INO	4-GEN	5-LEAD	6-KNO
1.	INO1	-	-	0.736	-	-	-
2.	INO2	-	-	0.659	-	-	-
3.	INO3	-	-	0.699	-	-	-
4.	INO4	-	-	0.740	-	-	-
5.	INO5	-	-	0.618	-	-	-
6.	KNO2	-	-	-	-	-	0.768
7.	KNO4	-	-	-	-	-	0.746
8.	LEAD3	-	-	-	-	0.740	-
9.	LEAD4	-	-	-	-	0.811	-
10.	LEAD5	-	-	-	-	0.763	-
11.	SIZE3	-	0.858	-	-	-	-
12.	SIZE4	-	0.850	-	-	-	-
13.	SIZE5	-	0.794	-	-	-	-
14.	SIZE6	-	0.631	-	-	-	-
15.	GEN1	-	-	-	0.780	-	-
16.	GEN2	-	-	-	0.759	-	-
17.	GEN3	-	-	-	0.660	-	-
18.	GEN4	-	-	-	0.581	-	-
19.	STR1	0.816	-	-	-	-	-
20.	STR2	0.803	-	-	-	-	-
21.	STR3	0.729	-	-	-	-	-
22.	STR4	0.817	-	-	-	-	-
23.	STR5	0.817	-	-	-	-	-

Note: Extraction method: Principal component analysis. Rotation method: Varimax with Kaiser normalization.

a. Rotation converged in six iterations.

The outcomes of the EFA on the factor rotation matrix for the independent variables (as displayed in Table 4) reveal that all factor loadings of the observed variables are statistically significant, surpassing the threshold of 0.5. The analysis yielded

six factors, aligning with each factor's initial hypotheses and corresponding measurement variables.

Table 5 summarises the regression model's results, indicating an adjusted R<sup>2</sup> coefficient of 58.1%, higher than the accepted threshold of 50%.

**Table 5.** The regression model summarisation

Model	R	R-square	Adjusted R-square	Std. error of the estimate	Change statistics					Durbin-Watson
					R-square change	F-change	df1	df2	Sig. F-change	
1	0.767	0.589	0.581	0.64701140	0.589	81.781	6	343	0.000	1.894

The analysis of variance (ANOVA) results in Table 6 displays a statistically significant valuation, with Sig. < 0.01, demonstrating the model's suitability and independent variables: innovation (INO), knowledge of ESG (KNO), leadership (LEAD), size of the enterprise (SIZE), board gender diversity (GEN), and board structure (STR).

These variables account for 66.78% of the variance observed in the dependent variable ESGP, leaving the remaining 33.22% of variance attributed to unaccounted factors within the model.

In Table 7, the Sig. for factor No. 3 — innovation (INO) is 0.019 > 0.05, so we exclude this factor because it is unreliable in research.

In Table 8, all five independent variables have Sig. > 0.05, indicating that all of them are appropriate for the model.

**Table 6.** Outcome of ANOVA

Model	Sum of squares	df	Mean square	F	Sig.	
1	Regression	205.412	6	34.235	81.781	0.000 <sup>a</sup>
	Residual	143.588	343	0.419	-	-
	Total	349.000	349	-	-	-

Note: Dependent variable: REGR factor score 1 for analysis 1. a. Predictors: Constant, REGR factor score 6, REGR factor score 5, REGR factor score 4, REGR factor score 3, REGR factor score 2, REGR factor score 1.

**Table 7.** Regression weighting

Coefficients													
Model		Unstandardized coefficients		Standardized coefficients	t	Sig.	95.0% confidence interval for Beta		Correlations			Collinearity statistics	
		Beta	Std. error	Beta			Lower bound	Upper bound	Zero-order	Partial	Part	Tolerance	VIF
1	Constant	-5.101E-17	0.035	-	0.000	1.000	-0.068	0.068	-	-	-	-	-
	STR	0.435	0.035	0.435	12.569	0.000	0.367	0.503	0.435	0.562	0.435	1.000	1.000
	SIZE	0.208	0.035	0.208	6.020	0.000	0.140	0.277	0.208	0.309	0.208	1.000	1.000
	INO	0.082	0.035	0.082	2.359	0.019	0.014	0.150	0.082	0.126	0.082	1.000	1.000
	GEN	0.389	0.035	0.389	11.218	0.000	0.320	0.457	0.389	0.518	0.389	1.000	1.000
	LEAD	0.294	0.035	0.294	8.494	0.000	0.226	0.362	0.294	0.417	0.294	1.000	1.000
	KNO	0.334	0.035	0.334	9.638	0.000	0.266	0.402	0.334	0.462	0.334	1.000	1.000

Note: Dependent variable: REGR factor score 1 for analysis 1.

**Table 8.** Correlations weighting

Variables		STR	SIZE	GEN	LEAD	KNO	Standardized residual	
Spearman's RHO	STR	Correlation coefficient	1.000	0.096	0.004	0.027	0.022	0.016
		Sig. (2-tailed)	0	0.072	0.945	0.611	0.688	0.760
		N	350	350	350	350	350	350
	SIZE	Correlation coefficient	0.096	1.000	0.007	0.031	0.036	0.071
		Sig. (2-tailed)	0.072	0	0.898	0.567	0.499	0.187
		N	350	350	350	350	350	350
	GEN	Correlation coefficient	0.004	0.007	1.000	-0.015	0.001	0.082
		Sig. (2-tailed)	0.945	0.898	0	0.786	0.988	0.126
		N	350	350	350	350	350	350
	LEAD	Correlation coefficient	0.027	0.031	-0.015	1.000	-0.012	-0.025
		Sig. (2-tailed)	0.611	0.567	0.786	0	0.823	0.647
		N	350	350	350	350	350	350
	KNO	Correlation coefficient	0.022	0.036	0.001	-0.012	1.000	-0.002
		Sig. (2-tailed)	0.688	0.499	0.988	0.823	0	0.965
		N	350	350	350	350	350	350
	Standardized residual	Correlation coefficient	0.016	0.071	0.082	-0.025	-0.002	1.000
		Sig. (2-tailed)	0.760	0.187	0.126	0.647	0.965	0
		N	350	350	350	350	350	350

Drawing upon the findings mentioned above, it is recommended that the regression equation be articulated in the following manner:

$$ESGP = 0.435 * STR + 0.389 * GEN + 0.334 * KNO + 0.294 * LEAD + 0.208 * SIZE \tag{2}$$

## 5. DISCUSSION

First, the results mentioned above carry significant implications. Primarily, the study highlights that board structure emerges as the most important factor influencing the pursuit of ESG. The reasonable number of board members, the dependence between the CEO and chairperson and other members, and the relatives' relationship among board members critically impact the pursuit of ESG. Typically, a larger board size can positively affect operative management performance. Having more members on board can increase the chance of possessing more reputable directors with diversified experience and backgrounds. As a result, this helps to provide a better understanding of comprehensive management. Moreover, it offers strategic insights into corporate operations and mitigates concerns related to the concentration of power, facilitating enhanced agent monitoring (Forbes & Milliken, 1999). Furthermore, a giant corporate board also means diverse interests that bring balance to the attraction between decision-making and good social care. According to stakeholder theory, self-reliant directors are more likely to be attuned to stakeholders' demands, encompassing requisites related to environmental performance. Moreover, independent directors always refer to high transparency. Being external to their enterprise, they attempt to safeguard their reputation in the community to secure future director appointments. As a result, they are expected to feel uninhibited in advocating for their firm to embrace environmental protection strategies. Traditionally, some corporates have originated from family businesses, so the board members sometimes have close relative relationships. This can negatively affect management decisions, including ESG pursuits. These findings align with previous research (Hussain et al., 2018; Nguyen & Thanh, 2022).

Second, board gender diversity also exerts a substantial impact on ESG pursuit. According to the research of Grant Thornton (2022), under increasing pressure from customers, employees, governments, and policymakers, enterprises globally have a trend of increasing gender parity. This has resulted in a global rise in the representation of women in senior management positions. Currently, the representation of women in top leadership roles has risen to 32%, marking a progression from 31% in 2021. These positions vary from chief executive officer to human resources director, with different roles in diversified sections such as business, human resources, marketing, etc. The augmentation of women's presence on boards can enhance the internal decision-making process and facilitate access to crucial resources, leading to the alignment of corporate strategies with the external environment. These findings align with previous research by Fernandez et al. (2019), and Rao and Tilt (2016), which stated that women on boards support enterprises to adopt environmentally and socially responsible behaviours that result in greater ESG disclosure levels provided to the different corporate stakeholders' benefit.

Third, the knowledge of ESG is a real problem for almost all Vietnamese enterprises 61% of surveyors answered that they did not commit to ESG

because of their lack of knowledge of ESG (PwC, 2022). The researchers found that more than half (67%) acknowledged encountering difficulties arising from the lack of transparent regulations. To enhance their ESG strategies, enterprises need clear guidelines, a holistic country roadmap, and a level playing field for industries. They are waiting for Vietnam's regulations and policymakers to declare its green finance rules and target areas. So the government needs more actions to engage in the development of green energy, environmental protection, corporate governance, and tackling social issues. Similarly, in previous research by Alrazi et al. (2015), their findings concluded that by studying the framework, managers and related parties could understand and evaluate corporate environmental behaviour more comprehensively.

In addition, managers may have an integrated approach to corporate environmental behaviour by enhancing a better understanding of the interrelationships between these framework concepts. As a result, they can know how their enterprises' characteristics, stakeholder pressures, and external pressure contribute to achieving environmental legitimacy.

Fourth, leadership factors also impact ESG pursuit. According to PwC's (2022) report, the role of senior leadership was highlighted in driving the implementation of ESG commitments. The critical role of the Board of Directors in ensuring that ESG practice is prioritised is to guide management, allocate resources and focus on the correct issues. Besides, there is a need to improve the board's skills in ESG matters. Traditionally, Vietnamese enterprises do not highly evaluate ESG matters. As a result, they are neglecting to prioritise the necessary training required to enhance confidence levels, even at board levels. Hence, the reason for only one-third of respondents replied that among those with board involvement in ESG (29%), they express confidence in their board's ESG competencies. Within the business, boards can drive an impactful ESG strategy only if they view ESG as a priority help. So, having substantial capabilities in ESG topics is imperative for Boards to fulfil their governance and oversight responsibilities effectively. This is also aligned with previous research, such as Pucheta-Martínez and Gallego-Álvarez (2019).

Lastly, the size of the enterprise is a crucial point to consider in Vietnam business because 60% of enterprises that have not yet committed to ESG matters are SMEs (PwC, 2022). Usually, SMEs do not have the appropriate financial capability or human resources to devote to ESG matters. On the other hand, large enterprises possess a greater understanding of ESG management tools. These results also support the findings of Drempeic et al. (2020) when they raised the problem of the ASSET4 database exhibiting company size bias in the assessment of corporate sustainability performance.

## 6. CONCLUSION

The research has provided valuable practical insight into the factors that impact the ESG pursuit among listed enterprises in an emerging market like Vietnam. Based on these findings, boards of

directors, operative managers, and other related stakeholders should develop suitable approaches and paths to fulfilling the ESG ambition for enterprises. The research results recommend that ESG pursuit should be developed with the care of having reasonable board structure and board gender diversity. In addition, Vietnamese-listed enterprises should spend to upskill boards and below managers on ESG matters. By prioritising the training knowledge of ESG, enterprises can improve the confidence levels of their employees and managers.

The study's findings disclosed the need for diversity in leadership. Based on the truth that almost of Vietnamese enterprises are SMEs, their leaders may manage by their traditional experience. And for them, managerial accounting knowledge in general, or ESG matters in particular, are so familiar. As a result, their investments in ESG pursuit may be impacted by their leadership style. So, enterprises should have more independent board members equipped with modernized management skills concerning ESG matters.

Besides, ESG pursuit is also affected by the size of enterprises. The study's findings indicated that in Vietnam, enterprises are not eager to spend on ESG expenditure because of their small size. They also need some help in recruiting and retaining ESG subject-matter specialists to fulfil their ESG ambitions. So, they must set a reasonable ESG strategy with detailed steps and key performance indicators (KPIs) and determine what they should do and how they can afford to expenditure on a roadmap around ESG matters.

Like any research endeavour, this study is not immune to limitations. The current investigation is confined by definite restraints, particularly those related to time and resources, which impeded a comprehensive exploration of diverse factors that could influence the outcomes of ESG goals. Future research endeavours should investigate additional factors that should have been addressed in the current study, encompassing, but not limited to, governmental directives, customer demands, and relevant variables.

## REFERENCES

1. Alkayed, H., & Omar, B. F. (2022). Determinants of the extent and quality of corporate social responsibility disclosure in the industrial and services sectors: The case of Jordan. *Journal of Financial Reporting and Accounting*. Advance online publication. <https://doi.org/10.1108/JFRA-05-2021-0133>
2. Alrazi, B., de Villiers, C., & van Staden, C. J. (2015). A comprehensive literature review on and constructing a framework for environmental legitimacy, accountability and proactivity. *Journal of Cleaner Production*, 102, 44–57. <https://doi.org/10.1016/j.jclepro.2015.05.022>
3. Carayannis, E. G., Sindakis, S., & Walter, C. (2015). Business model innovation as lever of organizational sustainability. *The Journal of Technology Transfer*, 40(1), 85–104. <https://doi.org/10.1007/s10961-013-9330-y>
4. Dam, L., & Scholtens, B. (2012). Does ownership type matter for corporate social responsibility? *Corporate Governance: An International Review*, 20(3), 233–252. <https://doi.org/10.1111/j.1467-8683.2011.00907.x>
5. De Villiers, C., & Dimes, R. (2021). Determinants, mechanisms and consequences of corporate governance reporting: A research framework. *Journal of Management and Governance*, 25(1), 7–26. <https://doi.org/10.1007/s10997-020-09530-0>
6. Dicuonzo, G., Donofrio, F., Ranaldo, S., & Dell'Atti, V. (2022). The effect of innovation on environmental, social and governance (ESG) practices. *Meditari Accountancy Research*, 30(4), 1191–1209. <https://doi.org/10.1108/MEDAR-12-2020-1120>
7. Drempetic, S., Klein, C., & Zwergel, B. (2020). The influence of firm size on the ESG score: Corporate sustainability ratings under review. *Journal of Business Ethics*, 167(2), 333–360. <https://doi.org/10.1007/s10551-019-04164-1>
8. Fernandes, R. B., & Barbosa, A. (2022). Factors associated with the voluntary disclosure of the integrated report in Brazil. *Journal of Financial Reporting and Accounting*, 20(3–4), 446–471. <https://doi.org/10.1108/JFRA-07-2020-0220>
9. Fernandez, W. D., Burnett, M. F., & Gomez, C. B. (2019). Women in the boardroom and corporate social performance: Negotiating the double bind. *Management Decision*, 57(9), 2201–2222. <https://doi.org/10.1108/MD-08-2017-0738>
10. Forbes, D. P., & Milliken, F. I. (1999). Cognition and corporate governance: Understanding boards of directors as strategic decision-making groups. *The Academy of Management Review*, 24(3), 489–505. <https://doi.org/10.2307/259138>
11. Garcia Martin, C. J., & Herrero, B. (2020). Do board characteristics affect environmental performance? A study of EU firms. *Corporate Social Responsibility and Environmental Management*, 27(1), 74–94. <https://doi.org/10.1002/csr.1775>
12. Grant Thornton. (2022). *Doing business in Vietnam: 2022*. <https://www.grantthornton.com.vn/globalassets/1-member-firms/vietnam/dbiv/doing-business-in-vietnam-2022.pdf>
13. Green, S. B. (1991). How many subjects does it take to do a regression analysis? *Multivariate Behavioral Research*, 26(3), 499–510. [https://doi.org/10.1207/s15327906mbr2603\\_7](https://doi.org/10.1207/s15327906mbr2603_7)
14. Hussain, N., Rigoni, U., & Orij, R. P. (2018). Corporate governance and sustainability performance: Analysis of triple bottom line performance. *Journal of Business Ethics*, 149(2), 411–432. <https://doi.org/10.1007/s10551-016-3099-5>
15. Kamarudin, K. A., Ariff, A. M., & Wan Ismail, W. A. (2022). Product market competition, board gender diversity and corporate sustainability performance: International evidence. *Journal of Financial Reporting and Accounting*, 20(2), 233–260. <https://doi.org/10.1108/JFRA-01-2021-0020>
16. Kotze, D., Malan, H., Ellery, W., Samuels, I., & Saul, L. (2010). *Assessment of the environmental condition, ecosystem service provision and sustainability of use of two wetlands in the Kamiesberg Uplands* (WRC Report No. TT 439/09). Water Research Commission (WRC). <https://www.wrc.org.za/wp-content/uploads/mdocs/TT439-09%20Conservation%20of%20Water%20Ecosystems.pdf>
17. Maffei, A., Grah, S., & Nuur, C. (2019). Characterization of the impact of digitalization on the adoption of sustainable business models in manufacturing. *Procedia CIRP*, 81, 765–770. <https://doi.org/10.1016/j.procir.2019.03.191>
18. Michelon, G., & Parbonetti, A. (2012). The effect of corporate governance on sustainability disclosure. *Journal of Management and Governance*, 16(3), 477–509. <https://doi.org/10.1007/s10997-010-9160-3>



19. Naciti, V. (2019). Corporate governance and board of directors: The effect of a board composition on firm sustainability performance. *Journal of Cleaner Production*, 237, Article 117727. <https://doi.org/10.1016/j.jclepro.2019.117727>
20. Nguyen, L.-T., & Thanh, C.-L. (2022). The influence of board characteristics on environmental performance: Evidence from East Asian manufacturing industries. *International Journal of Emerging Markets*, 17(10), 2702-2720. <https://doi.org/10.1108/IJOEM-07-2020-0744>
21. Nicolò, G., Zampone, G., Sannino, G., & De Iorio, S. (2022). Sustainable corporate governance and non-financial disclosure in Europe: Does the gender diversity matter? *Journal of Applied Accounting Research*, 23(1), 227-249. <https://doi.org/10.1108/JAAR-04-2021-0100>
22. PricewaterhouseCoopers (PwC). (2022). *Vietnam ESG readiness report 2022: From ambition to impact*. <https://www.pwc.com/vn/en/publications/vietnam-publications/esg-readiness-2022.html>
23. Pucheta-Martínez, M. C., & Gallego-Álvarez, I. (2019). An international approach of the relationship between board attributes and the disclosure of corporate social responsibility issues. *Corporate Social Responsibility and Environmental Management*, 26(3), 612-627. <https://doi.org/10.1002/csr.1707>
24. Rao, K., & Tilt, C. (2016). Board composition and corporate social responsibility: The role of diversity, gender, strategy and decision making. *Journal of Business Ethics*, 138(2), 327-347. <https://doi.org/10.1007/s10551-015-2613-5>
25. Valls Martínez, M. d. C., Cruz Rambaud, S., & Parra Oller, I. M. (2019). Gender policies on board of directors and sustainable development. *Corporate Social Responsibility and Environmental Management*, 26(6), 1539-1553. <https://doi.org/10.1002/csr.1825>
26. Ying, Z., & Xin-Gang, Z. (2021). The impact of renewable portfolio standards on carbon emission trading under the background of China's electricity marketization reform. *Energy*, 226, Article 120322. <https://doi.org/10.1016/j.energy.2021.120322>
27. Zahid, M., Rahman, H. U., Ali, W., Khan, M., Alharthi, M., Imran Qureshi, M., & Jan, A. (2020). Boardroom gender diversity: Implications for corporate sustainability disclosures in Malaysia. *Journal of Cleaner Production*, 244, Article 118683. <https://doi.org/10.1016/j.jclepro.2019.118683>
28. Zhang, Y., Sun, J., Yang, Z., & Wang, Y. (2020). Critical success factors of green innovation: Technology, organization, and environment readiness. *Journal of Cleaner Production*, 264, Article 121701. <https://doi.org/10.1016/j.jclepro.2020.121701>