

# Quy mô hội đồng quản trị và thành quả hoạt động: Vai trò trung gian của công bố thông tin ESG

## TÓM TẮT

Nghiên cứu này xem xét tác động trung gian của việc công bố thông tin môi trường, xã hội và quản trị (ESG) lên mối quan hệ giữa quản trị công ty và thành quả hoạt động của các công ty niêm yết trên Sở Giao dịch Chứng khoán Thành phố Hồ Chí Minh (HOSE) năm 2022. Lợi nhuận trên tài sản (ROA) là biến đại diện cho thành quả hoạt động; là biến phụ thuộc và **quy mô hội đồng quản trị là là biến độc lập**; công bố thông tin môi trường, xã hội và quản trị (ESG) là biến trung gian. Sử dụng mô hình phương trình cấu trúc (PLS-SEM), chúng tôi thấy rằng quy mô hội đồng quản trị có liên quan tích cực đáng kể đến thành quả hoạt động. Có tác động tích cực đáng kể giữa việc công bố thông tin môi trường, xã hội và quản trị (ESG) và thành quả hoạt động. Cuối cùng, công bố thông tin môi trường, xã hội và quản trị (ESG) đóng vai trò trung gian một phần đến mối quan hệ giữa quy mô hội đồng quản trị và thành quả hoạt động. Tóm lại, đặc điểm của quy mô hội đồng quản trị thúc đẩy các hoạt động công bố thông tin môi trường, xã hội và quản trị (ESG) để đạt được hiệu quả hoạt động cao hơn. Những kết quả này nhấn mạnh tầm quan trọng và giá trị của công bố thông tin môi trường, xã hội và quản trị (ESG) tại Việt Nam.

**Từ khóa:** *quy mô hội đồng quản trị, thành quả hoạt động, công bố thông tin môi trường, xã hội và quản trị (ESG)*

# Board size and performance: The mediating of ESG disclosure

## ABSTRACT

This study examines the mediating effect of ESG disclosure on the relationship between **board size** and performance of firms listed in the Ho Chi Minh City Stock Exchange (HOSE) in 2022. Return on assets (ROA) is a proxy for performance; as the dependent variable and **board size is the independent variable**; ESG disclosure is the mediating variable. Using structural equation model (PLS-SEM), we found that board size is significantly positively related to performance. There is significant positive impact between ESG disclosure and performance. Finally, ESG disclosure plays a partial mediating role on the relationship between board size and performance. To sum up, board size characteristics promote ESG disclosure activities to establish and reach higher performance. These results denote the importance and value of ESG disclosure in Vietnam.

**Keywords:** *board size, performance, ESG disclosure*

## 1. INTRODUCTION

The board of directors plays an important role in corporate governance, being the formal link between shareholders and managers.<sup>1,2</sup> Therefore, the board of directors can be described as “the pinnacle of the company's decision control system”.<sup>3</sup> This system plays an important role in monitoring and controlling managers to ensure that managers act in the best interests of all shareholders.<sup>4,5</sup> A board of directors formed with an optimal number of members will effectively monitor management and promote shareholder value enhancement.<sup>2</sup> Therefore, the size of the board of directors is a key factor affecting the performance of the company.<sup>6</sup>

Environmental, social, and governance disclosure (ESG disclosure) is an important activity that integrates environmental, social and governance considerations into business strategy.<sup>7</sup> Companies actively disclose ESG information in the belief that ESG disclosure brings financial benefits or improves the company's finance.<sup>8</sup> Jo and Harjoto<sup>[9]</sup> argue that corporate governance directly affects performance if there is no conflict of interest between managers and shareholders. However, the current conflict of interest may require ESG disclosure to act as a mechanism to resolve conflicts between stakeholders and shareholders.<sup>8</sup>

While the relationship between board size, ESG disclosure, and performance has been a major topic since the 1960s, investigations of these relationships have largely focused on the direct relationship between two of the three constructs, namely board size, ESG disclosure, or performance, respectively.<sup>10</sup> Recently, researchers have called for further research on the relationship between board size, ESG disclosure, and performance.<sup>7,11</sup> Despite its intuitive nature, research examining the mediating role of ESG disclosure on the relationship between board size and performance is still scarce.

Therefore, it is of interest to examine whether the impact of board size on performance can be explained by ESG disclosure.

Using a sample of companies listed on the HOSE, we find that board size has a direct and positive effect on performance. Furthermore, board size contributes significantly to creating value by improving ESG disclosure. Our findings reinforce previous arguments that board size enhances performance and increases firm value.

Our research makes significant contributions to the literature in two ways. First, while previous studies have investigated whether board size has a direct effect on performance, this is one of the few studies examining both the direct effect of board size on performance and the

indirect effect of board size on performance mediated by ESG disclosure in Vietnam.

Second, in terms of method, an important difference compared to the previous study in Vietnam that we examine the both direct and indirect effect of board size on performance by using PLS-SEM. The strength of PLS-SEM is to eliminate bias effects caused by measurement errors and build a latent structure hierarchy.<sup>12</sup> In summary, we contribute to the literature review by supplementing and extending the studies Nguyen Thi Anh Nguyet and Nguyen Van Chien<sup>[13]</sup>, Phan Tu Anh and Duong Long Hoang<sup>[14]</sup>, Vo Duc and Phan Thuy<sup>[15]</sup>, and Pham Thi Kieu Trang<sup>[16]</sup>.

The rest of the article is presented as follows. Part 2 is research overview and research hypothesis. Part 3 is research methods. Section 4 is research results and discussion. Section 5 is conclusion.

## 2. RESEARCH OVERVIEW AND RESEARCH HYPOTHESIS

### 2.1. Direct impact of board size on performance

Resource dependence theory suggests that larger board size may be associated with higher performance because larger board size may be better able to form resource linkages from the environment and secure important resources.<sup>17, 18</sup> Pfeffer and Salancik<sup>[17]</sup> found that board size is associated with better responsiveness to resource dependence and regulatory pressures. The authors argued that the greater the need for effective external linkages is, the larger the board size should be. Larger board size provides increased expertise, information, and quality advice. Zahra and Pearce<sup>[19]</sup> suggested that larger board size may improve performance by reducing CEO dominance (CEO). A meta-analysis by Dalton et al.<sup>[20]</sup> showed that larger board size may improve decision-making efficiency due to information sharing.<sup>21</sup> Pearce and Zahra<sup>[22]</sup> concluded that board size was positively associated with performance in 119 Fortune 500 firms during 1983–1989. Larger board size could potentially exploit more potential, with members appointed from different sectors, with different expertise and management skills. Similarly, Ciftci et al.<sup>[23]</sup> also agreed that larger board size seemed to bring more positive performance for firms in Turkey. Based on data from firms listed in Vietnam, Nguyen Thi Anh Nguyet and Nguyen Van Chien<sup>[13]</sup> and Phan Tu Anh and Duong Long Hoang<sup>[14]</sup> found that board size was positively associated with performance.

However, there are views and evidence that contradict the above argument. Proponents of agency theory (such as Eisenberg et al.<sup>[24]</sup> and De Andres et al.<sup>[25]</sup> argue that larger board sizes are less effective in improving firm performance because new ideas and perspectives are less likely to be effective, less likely to be adopted by the board, and the monitoring process is likely to be less effective.<sup>26,27,5</sup> Furthermore, larger board sizes may face problems of greater conflict and lower coordination among members leading to slower decision making and delays in information disclosure.<sup>18,28</sup> Fama and Jensen<sup>[3]</sup> argue that smaller boards are more effective and when boards exceed seven or eight members, they are less likely to be effective. Based on a sample of 879 small and medium-sized companies in Finland from 1992–1994, Eisenberg et al<sup>[24]</sup> also found a significant negative correlation between board size (ranging from two to nine, with an average of 3.7 members) and return on assets (ROA), and return on sales (ROS). According to the authors, performance declines for boards of three, four, and five members. This is lower than the optimal board size proposed in the previous hypothesis although these hypotheses tend to focus on larger companies. It means that this effect may exist in small firms where there is less separation between ownership and control than in large firms. This result supports the argument that small board size is more effective in improving performance. Hermalin and Weisbach<sup>[29]</sup> agree that larger board size may make it difficult for members to apply their knowledge and skills effectively. De Andres et al<sup>[25]</sup> find a negative relationship between board size and performance in a sample of 450 firms from 10 countries in Western Europe and North America. This result supports the view that large board size reduces performance both in countries where internal governance mechanisms are dominant and in countries where external governance mechanisms are dominant. Mak and Kusnadi<sup>[30]</sup> provide additional evidence of an inverse relationship between board size and firm performance in Singapore and Malaysia. Based on a sample of 176 firms listed on the Bombay Stock Exchange (India) in 2008 and 2009, Kumar and Singh<sup>[6]</sup> found a significant negative relationship between board size and performance, and this effect was weaker for firms with smaller board sizes. Vo Duc and Phan Thuy<sup>[15]</sup> conducted an in-depth examination of the impact of corporate governance characteristics on the performance of 77 listed firms in Vietnam from 2006 to 2011 using the Feasible Generalized Least Squares

(FGLS) method. The findings of indicate that board size has a negative impact on performance. Similarly, Pham Thi Kieu Trang<sup>[16]</sup> also found evidence that board size has a negative impact on return on assets (ROA) and Tobin's Q of 189 listed companies during the period from 2011 to 2014.

After controlling for the determinants of board characteristics, Lehn et al<sup>[21]</sup> found no evidence of a strong relationship between board size and performance for 82 US firms over the period from 1935 to 2000. Aljifri and Moustafa<sup>[29]</sup> also found no significant impact of board size on Tobin's Q for a sample of 51 firms listed on the Abu Dhabi Stock Exchange in 2004. This suggests that, in general, UAE firms do Aljifri and Moustafa<sup>[31]</sup> board members optimally, which may lead to a lack of coordination, communication, and influence on decision making. Al-ahdal et al.<sup>[32]</sup> used a sample of 53 listed companies in India and 53 listed companies in the Gulf Cooperation Council (GCC) countries for the period from 2009 to 2016. The results showed that board size has an insignificant impact on Return on Equity (ROE) and Tobin's Q. Furthermore, the country dummy results showed that Indian companies are performing better than companies in the Gulf countries in terms of corporate governance practices and performance.

In summary, the empirical evidence suggests that board size can be positively or negatively related or has no effect on performance. Most argue that larger boards are effective in promoting performance because larger board sizes allow for specialized leadership, which can lead to higher performance.<sup>20,19</sup> Boards are composed of people from different fields. The knowledge and wisdom of these board members can be used to make some strategic decisions, and this can boost the performance of the firm. Larger board size also provides greater monitoring capabilities and also enhances the firm's ability to form larger external linkages.<sup>18</sup> Based on all the above arguments, we propose the following hypothesis:

$H_1$  : Board size has a direct and positive impact on performance.

## 2.2. Indirect impact of board size on performance

Agency theory and stakeholder theory are two dominant perspectives used to explain the relationship between corporate governance and performance.<sup>33</sup> Haniffa and Cooke<sup>[34]</sup> explain that agency theory suggests that effective corporate

governance will improve a firm's ability to address emerging challenges and reduce agency conflicts. In this way, effective corporate governance will enhance legitimacy and improve performance.<sup>9</sup>

Drawing on stakeholder theory, Michelon and Parbonetti<sup>[35]</sup> examined the relationship between board structure, leadership, and board composition on sustainability. The authors argue that good governance and sustainability are complementary mechanisms for better stakeholder management. The authors further note that stakeholder theory provides a link between governance mechanisms and sustainability initiatives to align stakeholders' long-term management goals. Similarly, Gul and Leung<sup>[36]</sup> argue that agency theory better explains the role of corporate governance in stakeholder management. Agency theory and stakeholder theory complement each other by advocating the alignment of shareholder, stakeholder, and management goals.<sup>37</sup>

Using structural analysis method, Maali et al.<sup>[38]</sup> investigated the direct and indirect effects between corporate governance, sustainability performance, and ESG disclosure using a sample of 300 UK companies over the period 2005–2017. The authors found that corporate governance has a positive impact on sustainability performance. In addition, the results showed that ESG disclosure fully mediates the relationship between corporate governance and sustainability performance. Greater engagement in sustainability and ESG disclosure will reduce manager and shareholder conflict.

Based on data from the 500 largest family-owned businesses in the US from 2009 to 2018, Xu et al<sup>[8]</sup> find that ESG disclosure plays a mediating role in the relationship between corporate governance and performance. Furthermore, the mediating role of ESG disclosure on this relationship is stronger in family-owned firms than in non-family-owned firms. This supports the hypothesis that by performing well in ESG disclosure, family firms are more likely to conduct corporate governance to ensure ESG disclosure, thereby improving their future performance. These findings provide insights for all stakeholders, from managers to regulators and policy makers, to improve and sustain performance.

Thus, managers should combine corporate governance mechanisms with ESG disclosure to resolve conflicts of interest among

stakeholders and bring higher performance to the company.<sup>7</sup> Therefore, ESG disclosure can play an intermediary role in facilitating the relationship between corporate governance and performance.<sup>39</sup>

Based on all the above arguments, we propose the hypothesis:

$H_2$ : Board size has an indirect and positive effect on performance through the mediating variable of ESG disclosure.

### 3. RESEARCH METHODS

#### 3.1. Research sample

The initial sample was all companies listed on the Ho Chi Minh City Stock Exchange (HOSE) in 2022. We then excluded companies in the finance, banking, stock, insurance sectors and companies with incomplete data. Therefore, the final research sample was 290 companies.

#### 3.2. Variable measurement

*Performance:* We prefer to use accounting metrics rather than market-based ones because they more accurately reflect a company's internal operational performance.<sup>40</sup> Return on assets (ROA) is widely used as a proxy for performance.<sup>41</sup> ROA is defined as the total pre-tax accounting profit over total assets.<sup>42</sup>

*Board Size (BSIZE):* Board size is determined by the number of board members.<sup>42</sup>

*Environmental, social, and governance disclosure (ESG disclosure):* The ESG disclosure index is determined by content analysis method based on GRI guidelines and Circular No. 96 (2020). The ESG disclosure index is collected by extracting information related to environmental (10 items), social (6 items) and governance (3 items) categories from annual reports and/or sustainability reports (See Appendix). The average ESG disclosure score is determined by the following formula.<sup>34</sup>

$$\text{ESG Index}_j = \frac{\sum X_{ij}}{n_j}$$

In there:

$ESG_j$ : ESG disclosure index of company j;

$X_{ij}$  : If company j discloses the i-th environmental, social, and governance aspects. Each information index is determined by assigning a range of 0 – 2.<sup>43</sup> 2: If the company discloses quantitative or monetary information; 1: If the company discloses qualitative information;

0: If the company does not disclose any information.

$n_j$  : Number of information indexes for the jth company;

Test scale = mean(unstandardized items)

Average interitem covariance: .0996653

Number of items in the scale: 3

Scale reliability coefficient: 0.7399

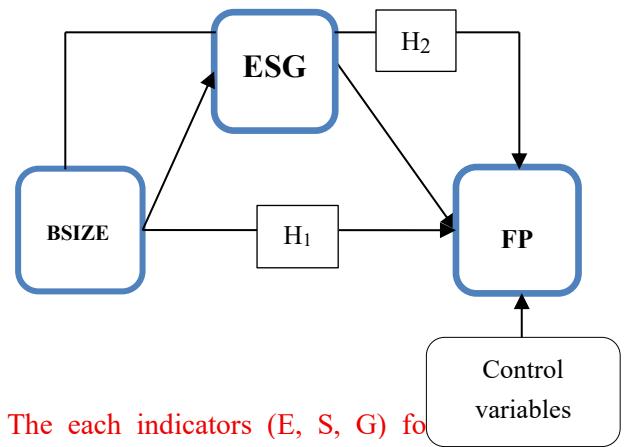
**Figure 1.** Research model

Source: Analysis results from Stata 14

Cronbach's alpha test was used to check the reliability of the collected data. The results showed that the Cronbach's alpha coefficient was 0.7399 (greater than 0.6), proving that the data was reliable.

*Control variables:* To control for differences in performance that may influence this relationship, the study uses the variables firm size (SIZE) and financial leverage (LEV) as control groups. Firm size (SIZE) is defined as the logarithm of total assets.<sup>44</sup> Financial leverage (LEV) is defined as the ratio of liabilities to total assets.<sup>44</sup>

#### 3.3. Research model



The each indicators (E, S, G) for consti aspect of the consti **Figure 2.** Research model, this is formative

<sup>n</sup> Source: Suggested by the authors

The research model is shown in figure 2. The first model examines the direct effect of board size on performance. The second model examines the indirect effect of board size on performance through the mediation of ESG disclosure.

## 4. RESULTS AND DISCUSSION

### 4.1. Descriptive statistics

**Table 1** Descriptive statistics

Variab	Maximu	Minimu	Avera	Standa
--------	--------	--------	-------	--------

le	m value	m value	ge value	rd deviation
ROA	0.536	0.001	0.080	0.091
BSIZE	11.000	3.000	5.786	1.418
E	1.909	0.000	0.440	0.438
S	2.000	0.000	1.016	0.509
G	1.333	0.000	0.191	0.349
SIZE	14.701	11.125	12.384	0.634
LEV	0.905	0.007	0.452	0.205

Source: Analysis results from Smart PLS

Accordingly, the average return on assets (ROA) of the companies in the sample is 0.080, ranging from a minimum of 0.011 to a maximum of 0.536. On average, companies listed on the Vietnamese stock market have 5.786 board members, **lower than the maximum of 11 members prescribed by law.** This corresponds to the characteristics of Vietnamese listed companies, which are generally small in scale, with a charter capital of merely VND 30 billion (around USD 1.2 million). The level of ESG disclosure is highest in the social aspect (S) (average 1.016), followed by the environmental aspect (E) 0.440 and the governance aspect (S) 0.191.

#### 4.2. Evaluation of measurement model

Formative measurement model is evaluated by convergent validity, collinearity between indicators, significance and relevance or outer weights. Because BSIZE, FP indicators are the single variables, we measure significance and relevance of outer weights. According to Table 2, the outer weights loading of variables E, S, G are 0.570, 0.849 and 0.623 respectively. In addition, the bootstrapping results show that these variables are all statistically significant at the 1% level, demonstrating good variable quality.

**Table 2** Significance and relevance of outer weights.

	BSIZE	ESG	FP	LEV	SIZE
BSIZE	1				
E		0.570 ***			
S		0.849 ***			

<b>G</b>		0.623 ***			
<b>LEV</b>				1	
<b>ROA</b>			1		
<b>SIZE</b>					1

Source: Analysis results from Smart PLS

#### 4.3. Structural model evaluation

##### 4.3.1. Multicollinearity

The results of the multicollinearity test (Table 3) show that the VIF coefficients of the research variables range from 1.000 to 1.375 (all < 3). Therefore, the research model does not suffer from multicollinearity.

**Table 3.** VIF coefficient.

	BSIZE	ESG	FP	LEV	SIZE
<b>BSIZE</b>		1	1.205		
<b>ESG</b>			1.044		
<b>FP</b>					
<b>LEV</b>			1.190		
<b>SIZE</b>			1.375		

Source: Analysis results from Smart PLS

##### 4.3.2. Coefficient of determination $R^2$

The results of the model's predictive ability assessment (Table 4) show that the adjusted  $R^2$  of the direct effect model is 20.3% and that of the indirect effect model is 3.1%.

**Table 4**  $R^2$  coefficient.

	R-square	R-square adjusted
<b>ESG</b>	0.034	0.031
<b>FP</b>	0.214	0.203

Source: Analysis results from Smart PLS

##### 4.3.3. Coefficient of determination $f^2$

The results of the impact coefficient  $f^2$  assessment (Table 5) show that the size of the board size has a weak impact on performance and ESG disclosure ( $f^2$  is 0.024 and 0.087, respectively).

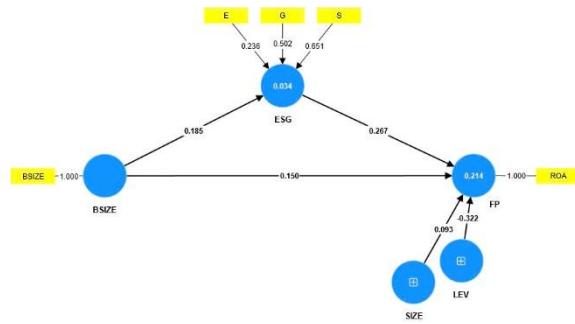
**Table 5** Coefficient of determination  $R^2$ .

	BSIZE	ESG	FP	LEV	SIZE
<b>BSIZE</b>		0.036	0.024		
<b>ESG</b>			0.087		
<b>FP</b>					
<b>LEV</b>			0.111		
<b>SIZE</b>			0.008		

Source: Analysis results from Smart PLS

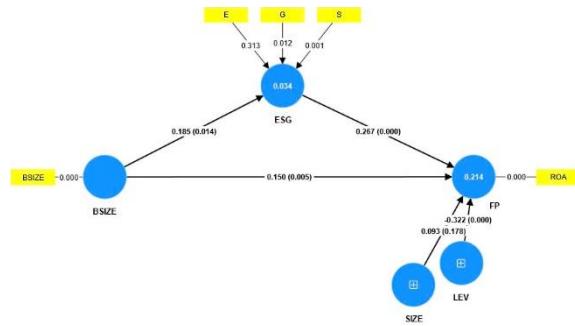
#### 4.4. Testing research hypothesis

Figures 2 and 3 show the results of the structural model estimation. The values on the path of the research variable are the outer loadings and the outer weights. The values in the research variable are  $R^2$ .



**Figure 2.** PLS-SEM Algorithm results

Source: Analysis results from Smart PLS 4



**Figure 3.** Bootstrap 5,000 results.

Source: Analysis results from Smart PLS 4

Table 6 presents the results of Bootstrap 5,000 testing of the research model.

**Table 6** Test results.

	Original sample	Sample mean	Standard deviation	t-value	p-value
<b>Direct relationship</b>					
BSIZE $\rightarrow$ FP	0.150	0.145	0.053	2.810	0.005

BSIZE $\rightarrow$ ESG	0.185	0.190	0.075	2.466	0.014
ESG $\rightarrow$ FP	0.267	0.274	0.060	4.488	0.000
LEV $\rightarrow$ FP	-0.322	-0.325	0.056	5.703	0.000
SIZE $\rightarrow$ FP	0.093	0.094	0.069	1.346	0.178
<b>Indirect relationship</b>					
BSIZE $\rightarrow$ FP	0.050	0.052	0.024	2.035	0.042

Source: Analysis results from Smart PLS 4

Accordingly, board size directly and positively affects performance at the 1% significance level ( $\beta = 0.150$ ,  $p < 0.01$ ,  $t = 2.810$ ) which may indicate the preference of listed companies in HOSE for large-sized boards that are proportional to performance. Thus, hypothesis  $H_1$  is accepted. Similar to previous studies such as Brennan<sup>[2]</sup>, Pfeffer and Salancik<sup>[17]</sup>, Dalton et al<sup>[20]</sup>, Kumar and Singh<sup>[6]</sup>, this result reaffirms the role of the board of directors in monitoring and controlling managers to ensure that managers act in the interests of all shareholders.<sup>4,5</sup> Consistent with resource dependence theory, larger board size can improve the efficiency of the decision-making process due to the sharing of knowledge, skills, and experience.<sup>21,45,17,18</sup> Therefore, the performance will be improved significantly.

Board size directly and positively affects ESG disclosure at 5% significance level ( $\beta = 0.185$ ,  $p < 0.05$ ,  $t = 2.466$ ), similar to Treepongkaruna et al.<sup>[46]</sup>, Beji et al.<sup>[47]</sup>, De Villiers et al.<sup>[48]</sup>, Endrikat et al.<sup>[49]</sup>. According to resource dependence theory, firms will benefit from larger boards. As more directors, each of whom can provide ESG disclosure-related skills, knowledge, and experience, motivate firms to improve their levels of ESG disclosure.<sup>45,48</sup> According to stakeholder theory, a larger and more diverse board creates more opportunities to develop stakeholder connections by incorporating social, environmental, and governance goals beyond purely financial goals.<sup>50</sup>

ESG disclosure has a direct and positive impact on performance at the 1% significance level ( $\beta = 0.267$ ,  $p < 0.01$ ,  $t = 4.488$ ), similar to Loh et al.<sup>[51]</sup>, Maji and Lohia<sup>[52]</sup>, Nguyen Thi Ngoc Bich et al.<sup>[53]</sup>. From the perspective of stakeholder theory, ESG disclosure provides complete and clear information, reduces information asymmetry, and reduces agency costs leading to increased performance.

Board size indirectly and positively affects performance through the mediator variable of ESG disclosure at the 5% significance level ( $\beta = 0.050$ ,  $p < 0.05$ ,  $t = 2.035$ ), thus, hypothesis H<sub>2</sub> is accepted. An effective board size will facilitate ESG disclosure to maintain and increase performance, ensuring that companies become more socially responsible.<sup>9</sup> This suggests that stronger performance can be achieved through higher levels of ESG disclosure, with ESG acting as a mediator between board size and performance. This can be interpreted as companies with larger board sizes may lead to better ESG disclosure and monitoring practices to ensure that corporate promises to external stakeholders are fulfilled, supporting claims of corporate legitimacy and improving ESG disclosure. Improved levels of ESG disclosure will generate positive signals about corporate reputation, creating a trustworthy atmosphere for business development and thus improving performance.<sup>7,39</sup>

## 5. CONCLUSION

This study examines the mediating effect of ESG disclosure on the relationship between board size, ESG disclosure, and performance. The empirical results show that ESG disclosure plays a partial mediating role in the relationship between board size and performance.

Our study extends the existing literature on the relationships between board size and performance, ESG disclosure and performance, and board size and ESG disclosure by investigating the three-way relationships among all three and identifying the mediating role of ESG disclosure between board size and performance.

This study provides practical implications for managers, investors, policymakers, and regulators. For business owners, this study demonstrates the importance of board size in enhancing ESG disclosure to improve long-term performance. For investors, the study provides valuable insights into how to increase investment efficiency and avoid over- or under-investment by highlighting the mediating effects of ESG disclosure. For policymakers and regulators, the study suggests that companies with higher ESG disclosure levels may have better performance. Therefore, there is a need for viable ESG disclosure policies and regulations to assess actual ESG disclosure to close the legitimacy gap.

This study has some limitations. First, the results of this study are based on companies

listed on HOSE. Second, we did not consider all the characteristics of corporate governance and performance was not considered according to market measures. Finally, we studied for a short period of time, so we did not have a basis to assess the direction of the impact **over time**. All these limitations can be the subject of future studies on the role of corporate governance in emerging markets.

## Acknowledgement

## REFERENCES

- [1] Aguilera, R. V., Desender, K., Bednar, M. K., & Lee, J. H. Connecting the dots: Bringing external corporate governance into the corporate governance puzzle, *Academy of Management Annals*, (2015), 9(1), pp. 483-573.
- [2] Brennan, N. Boards of directors and firm performance: is there an expectations gap?, *Corporate Governance: An International Review*, (2006), 14(6), pp. 577-593.
- [3] Fama, E. F., & Jensen, M. C. Separation of ownership and control, *The journal of law and Economics*, (1983), 26(2), pp. 301-325.
- [4] Jensen, M. C., & Meckling, W. H. Theory of the firm: Managerial behavior, agency costs and ownership structure, *Journal of Financial Economics*, (1976), 3(4), pp. 305-360.
- [5] Dalton, D. R., Daily, C. M., Johnson, J. L., & Ellstrand, A. E. Number of directors and financial performance: A meta-analysis, *Academy of Management Journal*, (1999), 42(6), pp. 674-686.
- [6] Kumar, N., & Singh, J. P. Effect of board size and promoter ownership on firm value: some empirical findings from India, *Corporate Governance: The international journal of business in society*, (2013), 13(1), pp. 88-98.
- [7] Jo, H., & Harjoto, M. A. Corporate governance and firm value: The impact of corporate social responsibility, *Journal of Business Ethics*, (2011), 103(3), pp. 351-383.
- [8] Xu, E. G., Graves, C., Shan, Y. G., & Yang, J. W. The mediating role of corporate social responsibility in corporate governance and firm performance, *Journal of Cleaner Production*, (2022), 375, pp. 134165.
- [9] Jo, H., & Harjoto, M. A. The causal effect of corporate governance on corporate social responsibility, *Journal of Business Ethics*, (2012), 106(1), pp. 53-72.
- [10] Zaman, R., Jain, T., Samara, G., & Jamali, D. Corporate governance meets corporate social responsibility: Mapping the interface, *Business & Society*, (2022), 61(3), pp. 690-752.

[11] Jamali, D., Safieddine, A. M., & Rabbath, M. Corporate governance and corporate social responsibility synergies and interrelationships, *Corporate Governance: An International Review*, (2008), 16(5), pp. 443-459.

[12] Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M., A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM) (Third ed.), USA: SAGE Publications, (2022).

[13] Nguyen Thi Anh Nguyet, & Nguyen Van Chien. Factors affecting corporate financial performance listed on Vietnam stock market, *Cogent Business & Management*, (2025), 12(1), pp. 2464937.

[14] Phan Tu Anh, & Duong Long Hoang. The effects of corporate governance mechanisms on firm performance: Empirical evidence from Vietnam, *The Journal of Asian Finance, Economics and Business*, (2021), 8(4), pp. 369-379.

[15] Vo Duc, & Phan Thuy. Corporate governance and firm performance: Empirical evidence from Vietnam, *Journal of Economic Development*, (2013), 7(1), pp. 62-78.

[16] Pham Thi Kieu Trang. Research on the relationship between corporate governance and firm performance: Empirical evidence from companies listed on the stock exchange in Vietnam, *International Journal of Management and Applied Research*, (2016), 3(4), pp. 172-183.

[17] Pfeffer, J., & Salancik, G. (2015). External control of organizations—Resource dependence perspective. In: Routledge.

[18] Goodstein, J., Gautam, K., & Boeker, W. The effects of board size and diversity on strategic change, *Strategic Management Journal*, (1994), 15(3), pp. 241-250.

[19] Zahra, S. A., & Pearce, J. A. Boards of directors and corporate financial performance: A review and integrative model, *Journal of Management*, (1989), 15(2), pp. 291-334.

[20] Dalton, D. R., Daily, C. M., Certo, S. T., & Roengpitya, R. Meta-analyses of financial performance and equity: fusion or confusion?, *Academy of Management Journal*, (2003), 46(1), pp. 13-26.

[21] Lehn, K. M., Patro, S., & Zhao, M. Determinants of the size and composition of US corporate boards: 1935-2000, *Financial Management*, (2009), 38(4), pp. 747-780.

[22] Pearce, J. A., & Zahra, S. A. Board composition from a strategic contingency perspective, *Journal of Management Studies*, (1992), 29(4), pp. 411-438.

[23] Ciftci, I., Tatoglu, E., Wood, G., Demirbag, M., et al. Corporate governance and firm performance in emerging markets: Evidence from Turkey, *International Business Review*, (2019), 28(1), pp. 90-103.

[24] Eisenberg, T., Sundgren, S., & Wells, M. T. Larger board size and decreasing firm value in small firms, *Journal of Financial Economics*, (1998), 48(1), pp. 35-54.

[25] De Andres, P., Azofra, V., & Lopez, F. Corporate boards in OECD countries: Size, composition, functioning and effectiveness, *Corporate Governance: An International Review*, (2005), 13(2), pp. 197-210.

[26] Jensen, M. C. The Modern Industrial Revolution, Exit, and the Failure of Internal Control Systems, *The Journal of Finance*, (1993), 48(3), pp. 831-880.

[27] Ahmed, K., Hossain, M., & Adams, M. B. The effects of board composition and board size on the informativeness of annual accounting earnings, *Corporate Governance: An International Review*, (2006), 14(5), pp. 418-431.

[28] Evans, C. R., & Dion, K. L. Group cohesion and performance: A meta-analysis, *Small group research*, (1991), 22(2), pp. 175-186.

[29] Hermalin, B., & Weisbach, M. S. Boards of directors as an endogenously determined institution: A survey of the economic literature, (2001), pp.

[30] Mak, Y. T., & Kusnadi, Y. Size really matters: Further evidence on the negative relationship between board size and firm value, *Pacific-Basin Finance Journal*, (2005), 13(3), pp. 301-318.

[31] Aljifri, K., & Moustafa, M. The impact of corporate governance mechanisms on the performance of UAE firms: an empirical analysis, *Journal of Economic and administrative sciences*, (2007), 23(2), pp. 71-93.

[32] Al-ahdal, W. M., Alsamhi, M. H., Tabash, M. I., & Farhan, N. H. S. The impact of corporate governance on financial performance of Indian and GCC listed firms: An empirical investigation, *Research in International Business and Finance*, (2020), 51, pp. 101083.

[33] Aras, G., & Crowther, D. Governance and sustainability: An investigation into the relationship between corporate governance and corporate sustainability, *Management Decision*, (2008), 46(3), pp. 433-448.

[34] Haniffa, R. M., & Cooke, T. E. Culture, Corporate Governance and Disclosure in Malaysian Corporations, *Abacus*, (2002), 38(3), pp. 317-349.

[35] Michelon, G., & Parbonetti, A. The effect of corporate governance on sustainability disclosure, *Journal of Management & Governance*, (2012), 16, pp. 477-509.

[36] Gul, F. A., & Leung, S. Board leadership, outside directors' expertise and voluntary corporate disclosures, *Journal of Accounting and Public Policy*, (2004), 23(5), pp. 351-379.

[37] Hussain, N., Rigoni, U., & Orij, R. P. Corporate governance and sustainability performance:

Analysis of triple bottom line performance, *Journal of Business Ethics*, (2018), 149, pp. 411-432.

[38] Maali, K., Rakia, R., & Khaireddine, M. How corporate social responsibility mediates the relationship between corporate governance and sustainability performance in UK: a multiple mediator analysis, *Society and Business Review*, (2021), 16(2), pp. 201-217.

[39] Fassin, Y., & Van Rossem, A. Corporate governance in the debate on CSR and ethics: Sensemaking of social issues in management by authorities and CEOs, *Corporate Governance: An International Review*, (2009), 17(5), pp. 573-593.

[40] Liu, Y., Miletkov, M. K., Wei, Z., & Yang, T. Board independence and firm performance in China, *Journal of Corporate Finance*, (2015), 30, pp. 223-244.

[41] Rose, P. The corporate governance industry, *J. Corp. L.*, (2006), 32, pp. 887.

[42] Core, J. E., Guay, W. R., & Rusticus, T. O. Does weak governance cause weak stock returns? An examination of firm operating performance and investors' expectations, *The Journal of Finance*, (2006), 61(2), pp. 655-687.

[43] Cormier, D., & Magnan, M. The revisited contribution of environmental reporting to investors' valuation of a firm's earnings: An international perspective, *Ecological Economics*, (2007), 62(3), pp. 613-626.

[44] Ameer, R., Ramli, F., & Zakaria, H. A new perspective on board composition and firm performance in an emerging market, *Corporate Governance: The international journal of business in society*, (2010), 10(5), pp. 647-661.

[45] Hillman, A. J., Withers, M. C., & Collins, B. J. Resource dependence theory: A review, *Journal of Management*, (2009), 35(6), pp. 1404-1427.

[46] Treepongkaruna, S., Kyaw, K., & Jiraporn, P. ESG controversies and corporate governance: Evidence from board size, *Business Strategy and the Environment*, (2024), 33(5), pp. 4218-4232.

[47] Beji, R., Yousfi, O., Loukil, N., & Omri, A. Board diversity and corporate social responsibility: Empirical evidence from France, *Journal of Business Ethics*, (2021), 173, pp. 133-155.

[48] De Villiers, C., Naiker, V., & Van Staden, C. J. The effect of board characteristics on firm environmental performance, *Journal of Management*, (2011), 37(6), pp. 1636-1663.

[49] Endrikat, J., De Villiers, C., Guenther, T. W., & Guenther, E. M. Board characteristics and corporate social responsibility: A meta-analytic investigation, *Business & Society*, (2021), 60(8), pp. 2099-2135.

[50] Hillman, A., & Keim, G. D. Shareholder value, stakeholder management, and social issues: what's the bottom line?, *Strategic Management Journal*, (2001), 22, pp. 125-139.

[51] Loh, L., Thomas, T., & Wang, Y. Sustainability Reporting and Firm Value: Evidence from Singapore-Listed Companies, *Sustainability*, (2017), 9(11), pp. 2112.

[52] Maji, S. G., & Lohia, P. Environmental, social and governance (ESG) performance and firm performance in India, *Society and Business Review*, (2023), 18(1), pp. 175-194.

[53] Nguyen Thi Ngoc Bich, Tran Thi Thanh Hai, Le Hoang Oanh, Nguyen Thi Phuoc, et al. Association between Corporate Social Responsibility Disclosures and Firm Value – Empirical Evidence from Vietnam, *International Journal of Accounting and Financial Reporting*, (2015), 5(1), pp. 212-228.