

Do Board Composition Attributes Lead to Better Environmental, Social and Governance Performance in Malaysia?

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ABSTRACT

This article aims to investigate the relationships between board composition attributes and the environmental, social, and governance (ESG) performance of 50 Malaysian listed companies from 2015 to 2021. Despite the growing number of literature on ESG performance, the effect of board composition on ESG performance still needs to be fully understood. This study analyses board size, board gender diversity, CEO duality roles, board independence, and board experience. The results indicate that board gender diversity, independence, and experience significantly affect ESG performance among listed companies in Malaysia. These findings provide regulators and corporations aiming to improve ESG performance by altering board structures with significant insights.

Keywords: ESG performance; board gender diversity; board experience; board independence; CEO duality

INTRODUCTION

Environmental, social, and governance (ESG) considerations are becoming more critical to companies as investors, and other stakeholders see them as an indicator of their long-term viability and a way to become more resilient, gain a competitive advantage, and create value. Initially, ESG data was utilised for managing risks and regulatory compliance, but it is now anticipated to provide new opportunities for commercial growth. As a result of a shift in global attitudes towards sustainability, companies are placing greater emphasis on ESG issues. As investors become increasingly interested in ESG data and disclosure to make prudent investment decisions, ESG considerations are increasingly becoming a part of corporate reporting (Mohammad & Wasiuzzaman 2021). Using ESG data, investors can identify risks and opportunities that come from non-financial data. This data can then be utilised to evaluate new investments in ESG-concerned companies to avoid financial losses. Appropriately addressing ESG issues may lead investors to sustain their investments (Eccles et al. 2012).

In Malaysia, ESG was mandated to include publicly listed companies' annual reports as part of corporate social responsibility (CSR) initiatives. However, companies were not obligated to report ESG information (Bursa Malaysia 2015). Bursa Malaysia developed the first CSR framework in 2006, concentrating on four dimensions: the marketplace (economy), the environment, and the workplace (social internal stakeholders). Bursa Malaysia defines CSR as a transparent, moral business strategy demonstrating appreciation for the environment, employees, community, shareholders, and other stakeholders. ESG should be the focus of business sustainability engagements, whereas CSR emphasises environmental and social responsibility. By analysing and emphasising elements beyond a company's financial success, ESG engagements can be developed and improved (Ahmad & Haraf 2013; Zahid & Ghazali 2015). Numerous studies have explored corporate governance and ESG practices in developing countries, such as Wasiuzzaman & Wan Mohammad (2020), Kee et al. (2020), Alsayegh et al. (2020), Abdul Rahman & Alsayegh (2021), Lestari & Adhariani (2022), Xiaomei et al. (2021), Martínez-Ferrero & Lozano (2021), and Wan Mohammad et al. (2022), but their results are mixed and inconclusive. In the context of Malaysia, ESG practices are becoming more prevalent and expected to receive more attention (Sheren 2022) in a particular period of Covid-19 recovery (PwC 2022).

Despite the growing importance of ESG considerations in corporations, how board composition affects ESG issues is still being determined. A well-composed board is widely regarded as an important factor in achieving better ESG performance. Gender diversity on boards, for example, has been linked to better ESG engagement as diverse perspectives result in more thorough and long-lasting conclusions (Wasiuzzaman & Mohammad 2020), support fair and reasonable decision-making, which can increase company performance (Adams & Ferreira 2009; Ferreira et al. 2015). In contrast, a lack of gender diversity on boards may result in poor ESG performance, as board members may fail to consider women's unique perspectives and experiences when making decisions. Scholars have claimed that non-dual roles may symbolise the concentration of power and the ability to effectively impose supervision (Amosh & Khatib 2021; Romano et al. 2020), further facilitating the allocation of resources to different programmes (Tahmid et al. 2022). Moreover, companies with more independent boards are expected to have a strong connection with better ESG performance (Wang et al. 2021), and they may act more effectively

in analysing ESG risks and opportunities when exploiting their relevant knowledge and skills (Pathan 2009). This leaves a significant gap related to the effective board compositions that can oversight top management functions in the context of fulfilling better ESG performance in Malaysia.

Thus, this study aims to examine the influence of board composition attributes on ESG performance among Malaysian listed companies. Using panel data of 350 firm-year observations of Malaysian listed companies from 2015 to 2021, the findings indicate a positive significant influence of board composition attributes such as board gender diversity, board independence, and board experience on ESG performance. The results revealed that the diversified, independent and adequate experience and skills of board members are inclined to perform better in ESG initiatives. Consistent with agency theory, companies fully embracing ESG are more likely to generate greater shareholder returns while fortifying and enhancing their business strategies (Fatemi et al. 2018; Zhao et al. 2018). This study contributes to the existing literature on governance determinants by highlighting the importance of board composition attributes in driving and prioritising business strategies related to ESG engagements.

This paper is organised as follows: The literature review, research framework, and hypothesis development are covered in the first section. The research methodology, including the sample, data, and empirical model, is described in the second section. The results are presented and discussed in the third section. The study's conclusions, limitations, and consequences are finally summarised in this section.

LITERATURE REVIEW

ESG CONCEPT

ESG includes three distinct pillars: social, environmental, and governance. Each pillar contributes an equal amount of significance and weight to the element of the corporation's social and environmental responsibility. The environmental disclosures of ESG highlight the company's pollution policies and how it utilises and interacts with natural resources. The environmental pillar discusses and provides information on a wide range of environmental issues, such as the use of renewable energy, waste management, the reduction of toxic gases and chemicals, the protection of biodiversity, the elimination of emission substances, the reduction of carbon emissions, and waste management and recycling. The social pillar of ESG includes a company's practises and policies relating to the rights and values of its workforce, including ensuring employee health and safety, diversity within the organisation, supplier communication, the advancement of fundamental human rights, the company's responsibility and commitment to the community, responsible marketing, and accepting responsibility for its products. Governance includes the company's policies and information relating to its organisational hierarchy and leadership, board membership, board member rights, board diversity, compensation strategies, governance and accountability information, taxation policies, shareholder rights, shareholder affairs, stakeholder engagement, CSR strategies, and other topics.

ESG PRACTICES IN MALAYSIA

Over the past few decades, ESG matters have experienced significant growth and now dominate the global socioeconomic landscape (Raimo et al. 2021). Companies increasingly focus on ethical and environmentally friendly business practices to achieve goals beyond maximising profits. Garzón-Jiménez and Zorio-Grima (2021), Aguilera-Caracuel and Guerrero-Villegas (2018), and Zainon et al. (2020) emphasised that companies operating in developing countries are also prioritising ESG and other forms of CSR. In many countries, including Malaysia, businesses are becoming more aware of ESG issues. Since 2007, publicly listed companies in Malaysia have been promoting sustainable practices, despite various challenges during its initial implementation. ESG concerns are now integrated into company strategies that address business, society, the workplace, and environmental issues. In December 2014, Bursa Malaysia launched the FTSE4Good Bursa Malaysia index, which uses ESG criteria to evaluate companies that follow the most prominent ESG frameworks, such as the Carbon Disclosure Project and the Global Reporting Initiative, and have good environmental, social, and governance policies. Furthermore, the Securities Commission of Malaysia in 2019 created the Sustainable and Responsible Investment Sukuk framework, which promotes the implementation of ESG standards to ensure ethical and responsible investment activities. Bursa Malaysia amended the Malaysian Code of Corporate Governance in 2021 in response to the increasing need for management and the board to handle ESG opportunities and risks.

According to the Malaysian Investment Development Authority, ESG practices gaining significance in Malaysia's efforts to transition to a low-carbon, sustainable economy (MIDA 2021). The Malaysian government actively supports ESG engagements that help to achieve sustainable development goals through programmes like the National Sustainable Development Goals (SDGs) Secretariat and the National SDGs Fund. Despite the growing importance of ESG practises, a majority of businesses in Malaysia have yet to fully integrate ESG considerations into their business strategies (PwC 2022). This may be due to a need for more awareness or

comprehension of ESG practices among businesses and a lack of government regulations and incentives. Therefore, further research is needed to better understand ESG practices in Malaysia.

HYPOTHESES DEVELOPMENT

BOARD COMPOSITION AND ESG PERFORMANCE

A company's board of directors is very important for promoting and implementing good ESG practices. As part of their responsibility to oversee the company, the board must make sure that sustainability and ESG issues are part of the company's strategy, governance, risk management, decision-making processes, and reporting on accountability. The MCCG 2021 highlights five best practices for board oversight of sustainability, including ESG. Firstly, the board must ensure the company has clear sustainability strategies, priorities and targets that promote long-term value creation for all stakeholders. Secondly, the board should also ensure that the stakeholders are effectively communicated with the companies' ESG policies and practices. Thirdly, the board should have sufficient understanding and knowledge of the company's sustainability issues. Fourthly, the board's performance evaluation should include a review of the board's performance in addressing the company's critical sustainability risks and opportunities. Finally, the board should choose a member of management whose main responsibility will be strategically managing sustainability.

It is well recognised that boards of directors contribute to ESG practises. To effectively fulfil this role, the board must consist of individuals with the required abilities and credentials (Bursa Malaysia 2021). Board members must have a connection to the companies' objectives and strategic goals, as well as a balance of independence, expertise, and other qualities (Nuhu & Alam 2023). Samara et al. (2023) argue that the board's composition largely influences the directors' efficacy in fulfilling their oversight roles. Consistent with the agency theory, boards with various perspectives, access to specialised knowledge, and an effective allocation of responsibilities are preferred. Board members with prior industry experience and in-depth industry knowledge could significantly enhance the overall performance of companies operating in specific industries (Bhatti & Sulaiman 2022). With their skills, competency, extensive knowledge, and experience, such members can effectively connect with various stakeholders and attain financial and non-financial accomplishments (Aladwey et al. 2022; Fama & Jensen 1983). Overall, boards must have the appropriate mix of skills, knowledge, and expertise to serve as a control mechanism for management actions and activities (Minichilli et al. 2009), including those related to ESG (Bursa Malaysia 2021). This indicates a considerable gap in relation to the board members' capability in overseeing management decisions in the context of enhancing ESG performance in Malaysia.

BOARD SIZE

The ideal size of corporate boards is a topic of debate, with proponents of smaller boards claiming they are more successful and efficient (Amran et al. 2014; Disli et al. 2022). However, research has shown that in complex companies, a larger board size correlates with improved financial and non-financial performance (Cheng & Courtenay 2006; Htay 2012). The inconclusive results may be attributable to a number of factors, such as the complexity of the organisational structure, the country in which the business operates, and the nature of the industry (Pathan 2009; Shamil et al. 2014).

Opponents of large board size argue that smaller board enhances monitoring by expediting discussion and decision-making, thus minimising agency challenges (Alnabsha et al. 2018; Birindelli et al. 2018) and may hinder them from effectively overseeing management decisions. In contrast, proponents of larger boards offer multiple justifications. It is believed that a larger board can facilitate the distribution of tasks so that members are not overburdened with responsibilities, thereby preserving their monitoring and controlling abilities (Hsu & Yang 2022; Rahman & Ali 2006). Therefore, larger boards anticipate contributing diverse perspectives to the decision-making process, resulting in improving ESG performance (Birindelli et al. 2018; García-Sánchez et al. 2021). It is therefore hypothesised as follows:

H₁ The board size positively and significantly influences ESG performance.

BOARD GENDER DIVERSITY

Research has consistently shown that greater board diversity improves board effectiveness, performance, and social legitimacy (Kamaludin et al. 2022; Rao & Tilt 2016). In particular, both theory and data imply that female board members offer distinctive insights and expertise in the area of corporate social responsibility (Mohammad et al. 2022; Soong & Hooy 2016). The vast majority of psychological research has shown that men and women have different ways of thinking, with women typically being better at developing strong relationships with others

and attending to their needs (Gurol & Lagasio 2023; Kanadli et al. 2022). Women are more inclined to adopt an inclusive leadership style that prioritises the voices and needs of all stakeholders. They are also more diplomatic and cooperative than men, which helps them be better at finding a solution to end interpersonal disagreements (Saggar & Singh 2017; Zahid et al. 2019). Women are also more likely to be concerned about the welfare of others due to the perception that they possess community traits (Eagly et al. 2003; Pereira 2017). According to Saggar and Singh (2017) and Wasiuzzaman and Wan Mohammad (2020), women on boards are more likely to achieve superior ESG performance in the presence of sustainability policies as they aim to minimise knowledge asymmetry through enhanced ESG performance. Although previous studies have revealed that board diversity can help to improve ESG performance, there is insufficient evidence to conclude that diverse boards can bring a broader range of viewpoints and experiences to the decision-making process, which may also aid in the identification and resolution of ESG issues. So, the following hypothesis is formulated:

H₂ Board gender diversity positively and significantly influences ESG performance.

CEO DUALITY

Previous studies show that separating the chairman and chief executive officer roles enhances the efficiency of a company's control and governance responsibilities, lowers that company's costs, and enhances both its financial and non-financial performance (Naciti 2019; Suttipun & Yordudom 2022). However, the extent to which the dual positions affect ESG performance is arguable. Nicolo et al. (2023) contend that the separation may bring new knowledge, improved responsibility, and more substantial control over management opportunism. On the other hand, holding both positions, as opposed to the recommended governance practice, could positively influence corporate social practices (Arayssi et al. 2020; Pucheta-Martínez & Gallego-Álvarez 2019). Although there are inconclusive findings, the existence of MCCG2021 recommendation on the separation of these two positions and supported by previous literature, it is predicted that:

H₃ A CEO with a non-dual role has a positive and significant influence on ESG performance.

BOARD INDEPENDENCE

By virtue of their independence from management, independent directors can better provide impartial evaluations of the effectiveness of the board's policies and procedures relating to oversight of the business enterprise (Birindelli et al. 2018). Their limited involvement in day-to-day operations allows them to act independently and avoid bias in decision-making, especially regarding critical issues such as ESG. In particular, independent directors have greater incentives to exert effective and impartial control over managers' decisions because they are not attached and have no connections to any resources and individuals within the organisation (Nicolo et al. 2023). Further, inconclusive findings are found in prior studies. For instance, a weak correlation between the number of independent directors and the disclosure of sustainability data has revealed by Michelon and Parbonetti (2010) and Allegrini and Greco (2011). While other research has linked a higher percentage of independent directors to improved ESG performance (Nicolo et al. 2023), there were evidence from studies by Aladwey et al. (2022) and Kamaludin et al. (2022) that shows boards with a high degree of independence are anticipated to incline toward environment- and social-related initiatives. Based on these arguments, this study hypothesises that:

H₄ Board independence has a positive and significant influence on ESG performance.

BOARD EXPERIENCE AND SKILLS

A number of studies have found that boards with specialised knowledge and expertise in areas related to ESG are more effective at addressing these issues, leading to improved performance on these measures. Continuous training, both formal and informal, and related knowledge obtained from personal and working experiences can help develop this expertise (Jamil et al. 2021). In this context, Bhatti and Sulaiman (2022) and Amosh and Khatib (2021) documented that boards equipped with relevant training and adequate knowledge in sustainability matters tend to take part in actions connected to sustainability and are more inclined to engage in ethical behaviour, leading to improved ESG performance. Overall, the research suggests that board expertise and skills can positively impact ESG performance and that boards with specialised knowledge in these areas may be better able to address and manage ESG issues. Therefore, it is hypothesised that:

H₅ Board experience and skills positively and significantly influence ESG performance.

RESEARCH METHODOLOGY

SAMPLE OF THE STUDY AND VARIABLE MEASUREMENTS

A sample of companies with complete ESG performance scores from 2015 to 2021, as provided by the Refinitiv ESG database, was chosen for this study. The Refinitiv ESG data is widely used as a tool to measure ESG performance, as demonstrated by prior studies (Duque-Grisales & Aguilera-Caracuel 2021; Mohammad & Wasiuzzaman 2021; Zainon et al. 2020). The Refinitiv ESG rating is intended to quantify a company's relative ESG performance, commitment, and effectiveness clearly and objectively across ten primary topics that gathered over 450 distinct data points. Based on the weights assigned to each category by industry, Refinitiv aggregated the results and divided them into three pillars: environmental, social, and corporate governance. The Thomson Reuters Eikon database was mined for board member information. In order to prevent additional exclusion due to missing data, we hand-collected a number of data from companies' annual reports. Finally, Table 1 summarises the sample gathered for 50 firms, consisting of 350 observations from various industries.

TABLE 1. Tabulation of industry

Industry	Freq.	Per cent
Industrials	21	6.00
Consumer Products & Services	112	32.00
Telecommunications	21	6.00
Utilities	49	14.00
Financials	63	18.00
Transportation & Logistics	28	8.00
Construction	56	16.00
Total	350	100.00

DEPENDENT VARIABLE: ESG PERFORMANCE

ESG performance, proxied by ESG scores, is non-financial data that comprises scores that relate to companies' performance which is assessed through various criteria that measure ESG engagements of the companies, with a high score indicating better ESG performance (Alsayegh et al. 2020; Duque-Grisales & Aguilera-Caracuel 2021; Zainon et al. 2020). Environmental criteria include data on an ecological footprint and its environmental impact. While social criteria refer to how a company treats its employees and the community it operates in, how it treats minorities, how it treats the environment, how it treats human rights, and how it treats the influence its goods have on society as a whole.

INDEPENDENT VARIABLE: BOARD COMPOSITION ATTRIBUTES

This study uses board composition attributes as independent variables. This study builds on previous research on board compositions influencing ESG performance including board knowledge and expertise (Bhatti & Sulaiman 2022; Jamil et al. 2021), board independence and size (Birindelli et al. 2018), board gender diversity (Al-Maghzom et al. 2016; Wasiuzzaman & Mohammad 2020) and CEO duality (Naciti 2019).

Board Size: Total number of directors is counted in determining the size of the board. The number of board members does not include the deputy chair.

Board Gender Diversity: Female board representation was determined by dividing the number of female directors by the total number of board director positions.

CEO Duality Role: A dummy variable indicates the separation of Board Chair and CEO duties represented by CEO duality roles. If the chief executive officer and the chairman of the board were the same person, a score of zero was assigned, while if they were two different individuals, a score of one was assigned.

Board Independence: Independent director percentage is calculated by dividing the number of independent directors by the total number of board directors.

Board Experiences and Skills: The experiences of board members can be evaluated by considering their expertise in areas such as financial management, product development, marketing, and business strategy. It can also be

assessed by looking at their level of industry knowledge, ability to effectively communicate with other stakeholders, and understanding of the company's culture. To calculate the proportion of board members with relevant experience and expertise, we divide the number of board members who possess specific experiences by the total number of board members in the organisation.

CONTROL VARIABLE

The model includes the control variables of firm size, leverage, and dummy variables of industries to determine whether these factors might affect the proposed relationships. Data was collected from the Thomson Reuters Eikon Datastream database. The control variables, their values, and the range of other factors included in this analysis are listed in Table 2.

TABLE 2. Variables and the measurements

Abbreviated Name	Full Name	Measurement	References
<i>Dependent variable</i>			
ESGP	ESG Performance	The total ESG score of the firm.	Alsayegh et al. (2020)
<i>Independent variables</i>			
BSize	Board Size	Total number of members on the board of directors.	Birindelli et al. (2018)
BGEN	Board Gender Diversity	Percentage of total women as the board of directors.	Wasiuzzaman & Wan Mohammad (2020)
CDUAL	CEO Duality Role	A dummy variable: 1 if the CEO is non-dual role; and 0 if otherwise.	Suttipun & Yordudom (2022)
BIND	Board Independence	Percentage of the independent board members.	Birindelli et al. (2018)
BES	Board Experience and Skills	Percentage of board members with experiences and skills.	Bhatti & Sulaiman (2022)
<i>Control variable</i>			
FSIZE	Firm Size	Natural logarithm of total revenue.	Duque-Grisales & Aguilera-Caracuel (2020)
LEV	Leverage	The ratio of total liabilities to total assets.	Duque-Grisales & Aguilera-Caracuel (2021)
IND	Industry Classification	A dummy variable for seven industries i.e., Industrials, Consumer Products & Services, Telecommunications, Utilities, Financials, Transportation & Logistics, Construction.	Al Amosh & Khatib (2021)

To achieve the purpose of the study, the following empirical model formula is provided:

$$ESGP = \beta_0 + \beta_1 BSIZE_{it} + \beta_2 BGEN_{it} + \beta_3 CDUAL_{it} + \beta_4 BIND_{it} + \beta_5 BES_{it} + \beta_6 FSIZE_{it} + \beta_7 LEV_{it} + \beta_8 \sum IND_{it} + \varepsilon_{it}$$

EMPIRICAL RESULTS AND DISCUSSION

DESCRIPTIVE STATISTICS

Descriptive statistics for all continuous variables in this analysis are shown in Table 3. Scores of 51.733 percent on the ESG index indicate a median level of ESG performance among Malaysian PLCs. The board sizes range from a minimum of 3 to a maximum of 17, with a mean of 9.217. The average of nine board members satisfies Bursa Malaysia's requirement for board size. The average percentage of board gender diversity is reported at 22.169 percent explains the low representation of women members on boards of Malaysian PLCs. Meanwhile, on average, the board members of Malaysian listed companies comprising of 52.177 percent of independent directors. It also indicates that on average, 55.992 percent of board members possess specific experience and skills. Concerning the control variables, it has been revealed that the average size of the company, as measured by its total revenue, is USD\$14.27 million. The ratio of assets to equity is a measure of leverage, and it reveals that Malaysian PLCs have, on average, a leverage level of 3.822. In addition, Table 4 reveals that 42 out of 350 companies-years of observations (or seven companies) are practising CEO duality, despite the MCCG2021 recommendation to separate these two positions to ensure a balance of power and authority for transparent and effective decision making.

TABLE 3. Descriptive Statistics of Continuous Variables

Variable	Obs	Mean	Std. Dev.	Min	Max
ESG Performance	350	51.733	16.432	5.14	87.15
Board Size	350	9.217	2.115	3	17
Board Gender Diversity	350	22.169	12.44	0	57.14
Board Independent	350	52.177	13.495	25	100
Board experience and Skills	350	55.992	18.443	0	100
Firm Size	350	14.27	.999	11.565	16.352
Leverage	350	3.822	3.59	1.048	15.36

TABLE 4. Frequency of Categorical Variables

CEO Duality Role	Freq.	Percent
Yes	42	12.00
No	308	88.00
Total	350	100.00

According to the Pearson correlation indicators presented in Table 5, there were no concerns demonstrated involving multicollinearity between the independent variables (pairwise correlation). The correlation between an independent board and ESG performance was 0.346, which was the highest of all of the explanatory variables; all of the other variables' correlations were lower than 0.346. Table 6 demonstrates that the variance inflation factors are less than 5, ranging from 1.111 to 4.772 with a mean of 2.37 for the model that was provided, which indicates that the findings are not skewed as a result of multicollinearity (Hair et al., 2012).

TABLE 5. Pairwise correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ESG Performance	1.000							
Board Size	0.116	1.000						
Board Gender Diversity	0.259*	0.098	1.000					
CEO Duality Role	0.124	-0.012	0.105	1.000				
Board Independent	0.346*	-0.121	-0.085	-0.014	1.000			
Board Experience & Skills	-0.038	-0.171*	0.059	-0.163*	-0.236*	1.000		
Firm Size	0.055	0.250*	-0.021	-0.215*	-0.021	0.000	1.000	
Leverage	0.206*	0.054	0.104	-0.054	0.158*	-0.070	0.267*	1.000

Note: * shows significance at 0.01 and industry correlation coefficients are not reported in the table.

TABLE 6. Variance Inflation Factor

	VIF	1/VIF
Firm Size	1.478	.677
Board Independent	1.323	.756
Board Experience and Skills	1.251	.799
Board Size	1.22	.82
CEO Duality Role	1.207	.829
Board Gender Diversity	1.11	.901
Mean VIF	2.37	.

Note: Industry VIFs are not reported in this table.

MULTIVARIATE ANALYSIS AND DISCUSSION

A static panel data regression was applied to examine the effects of each variable, including the control variables, and the results were analysed. Using the Breusch and Pagan Lagrangian Multiplier test, the random effects (RE) model has been found preferable over the Pooled OLS (POLS), demonstrated by a p-value < 0.05. A Hausman test was performed to compare fixed and random effect models. The random-effect model was chosen since its p-value was > 0.05 at a 5% significance threshold. The null hypothesis cannot be rejected; hence a random effect model is best.

Table 7 reports the empirical results using the RE model. The model shows a good fit, supported by an R-squared of 31.3 percent, representing the variability of ESG Performance justified by the independent variables and control variables in the regression model. Specifically, an insignificant influence of board size and ESG performance has been found ($\beta = 0.031$, $p > 0.01$), implying that the board size does not exert any pressure on the managers in determining their strategies toward better ESG performance. This contradicts Disli et al. (2022) Birindelli et al. (2018) and Alnabsha et al. (2018) that found board size does matter to enhance monitoring and decision making. Thus, there are insufficient amounts of evidence to support H₁. Although previous research has shown that the size of the board does affect increased productivity and achievement, however, this may not be accurate in the context of developing countries due to the selection of the board members could be based on the complexity of the companies in considering ESG matters to the business decisions.

As regards board gender diversity, the result indicates a positively significant influence of board gender diversity on ESG performance ($\beta=0.44$; $p < .001$). This finding is consistent with Saggar & Singh (2017) and Wasiuzzaman & Wan Mohammad (2020) arguments that women are more likely to engage in "relational governance", which entails social interactions to forge reliable connections that can put pressure on organisations to make greater efforts to address environmental issues and are associated with better ESG performance. Similarly, the result evidence that representation of women in decision-making positions, who typically have an interactive leadership style, able to seek others' input, share their information, and effectively communicate with their subordinates (Gurol & Lagasio 2023; Kanadli et al. 2022) can lead the team to improve sustainability reporting, as women tend to prioritise the needs of others and may be more likely to prioritise such concerns in their work. Therefore, H₂ is supported.

Contrary to the hypothesis, the CEO non-dual position does not influence ESG performance ($\beta=2.119$; $p > .01$), indicating a non-dual role of the CEO has not demonstrated an authoritative function to influence better ESG performance (Suttipun & Yordudom 2022; Naciti 2019). Although Naciti (2019) argues that the separation of chairman and CEO positions could improve organisations' control and governance, lower expenses, and boost non-financial as well as financial performance, the result has insufficient evidence to support H₃.

As to board independence, the result shows that the independent board has a positive and significantly influence on ESG performance ($\beta=0.30$; $p < .001$). This finding confirms that independent board members are a sign of good oversight of how well management is doing. So, having independent board members might lead to more ESG engagement and the prioritisation of information, especially about sustainability, for stakeholders (Aladwey et al. 2022; Islam et al. 2023). Companies that are more concerned with their reputation are more likely to demonstrate superior ESG performance than other companies (Suttipun & Yordudom 2022). Hence, H₄ is supported.

Also, board experience and skills have a positively significant influence on ESG performance ($\beta=0.066$; $p < .01$). This finding corroborates with previous findings that experienced board members prefer to be involved in ESG activities because they can integrate various knowledge, skills and years of experience (Bhatti & Sulaiman 2022), thus they tend to involve in ESG initiatives (Jamil et al. 2021). Hence, H₅ is supported.

Regarding control variables, leverage is the only variable that significantly influences ESG performance, which is consistent with prior studies (Duque-Grisales & Aguilera-Caracuel 2021; Abdul Rahman et al. 2021). This finding infers that companies with a high level of leverage prefer to participate in ESG projects that allow them to portray their commitment toward legitimacy and transparency in their efforts on environmental, social and governance issues, which in turn attracts fund providers.

TABLE 7. Multivariate Regression Models

	OLS	RE
Constant	-31.729** (0.028)	10.511 (0.638)
<i>Independent variables:</i>		
Board Size	1.033*** (0.008)	0.031 (0.944)
Board Gender Diversity	0.345*** (0.000)	0.44*** (0.000)
CEO Duality role	7.446*** (0.003)	2.119 (0.439)
Board Independence	0.462*** (0.000)	0.3*** (0.000)
Board Experience & Skills	0.119*** (0.001)	0.066* (0.099)
<i>Control variables:</i>		
Firm Size	1.663* (0.066)	0.262 (0.863)
Leverage	0.766** (0.043)	1.019* (0.061)
Industry	Included	Included
R-squared	0.317	0.273
F-test	11.986	-
Chi-square	-	105.378

Note: *t* statistics in parentheses, * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

CONCLUSION, LIMITATION AND FUTURE RESEARCH

This study examines the relationship between board composition attributes and ESG performance among Malaysian listed companies. Based on a sample of 350 firm-year observations for seven-year periods from 2015 to 2021, this study provides empirical evidence on the influence of board composition attributes on ESG performance. Specifically, the descriptive results show a relatively moderate level (or 51.7 percent) of ESG

performance among Malaysian listed companies. Consequently, the results show mixed findings as proposed in hypotheses statements. Overall, empirical findings show that a high proportion of board gender diversity in the board, more independent board members, and having relevant experience and skills among board members significantly influence better ESG performance. This may be because of the better monitoring role of boards able to assure better ESG performance. Meanwhile, board size and CEO duality have no influence on ESG performance. This contradicts findings to the hypotheses' predictions explaining the oblique views of the role of governance in determining corporate complex decisions.

This study contributes to the previous literature by examining board composition attributes on ESG performance. This study offers some insight based on empirical evidence that sheds light on how good governance may incentivise managers to prioritise business strategies related to the environment and society. Accordingly, effective governance mechanisms demonstrate the importance of gender-balanced boards in building good relationships with management and stakeholders so that a broader range of perspectives can be informed for better engagement in ESG. A diversified and independent board combination represents a strong mix of governance mechanisms that are particularly effective in enhancing ESG performance among Malaysian listed companies. The ability of an independent board to exert a more effective monitoring function on the management is made possible by the fact that the stakeholders require improved information to make significant decisions. Prioritising the sustainability agenda by emphasising ESG-related efforts is paramount for assisting companies in functioning in more sustainable and responsible manners, which could help to improve their reputation and relationships with key stakeholders.

From a practical perspective, this study provides supporting arguments for policymakers, regulators, and society by highlighting the significant aspects of MCCG2021 concerning board independence, board diversity and the separation of roles between CEO and Chairman. In particular, the findings confirm that the presence of at least one-third of independent directors on the board can help to protect shareholder value and act in the best interests of all stakeholders (Bursa Malaysia, 2015). The results also found that a minority number of companies are still practicing dual roles of CEO-Chairman, implying the regulators may require more efforts to reinforce the importance of good governance mechanisms for capital market stability.

This study is subject to some limitations. First, the sample is based on limited data due to the small number of ESG-performing companies in Malaysia. Second, this study uses secondary data obtained from the Thomson Reuters Eikon Datastream database, thus this study did not consider factors related to behavioural aspects and subjective views of board members in generalising findings on specific board variables such as board independence and board size. Therefore, future research may consider a larger sample to include companies from other countries within the same region for more extensive observations to ascertain the generalisation of the findings. Similarly, future studies may consider examining other variables to represent behavioural aspects of individuals.

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REFERENCES

- Adams, R. B., & Ferreira, D. 2009. Women in the Boardroom and Their Impact on Governance and Performance. *Journal of Financial Economics* 94(2): 291–309.
- Aguilera-Caracuel, J., & Guerrero-Villegas, J. 2018. How corporate social responsibility helps MNEs to improve their reputation. The moderating effects of geographical diversification and operating in developing regions. *Corporate Social Responsibility and Environmental Management* 25(4): 355–372.
- Ahmad, N. N. N., & Haraf, A. S. A. 2013. Environmental disclosures of Malaysian property development companies: Towards legitimacy or accountability? *Social Responsibility Journal* 9(2): 241–258.
- Aladwey, L., Elgharabawy, A., & Ganna, M. A. 2022. Attributes of corporate boards and assurance of corporate social responsibility reporting: evidence from the UK. *Corporate Governance (Bingley)* 22(4): 748–780.
- Allegrini, M., & Greco, G. 2011. Corporate boards, audit committees and voluntary disclosure: Evidence from Italian Listed Companies. *Journal of Managerial Governance* 17: 187-216.
- Al-Maghzom, A., Hussainey, K., & Aly, D. 2016. Corporate governance and risk disclosure: evidence from Saudi Arabia Abdullah Al-Maghzom, University of Gloucestershire UK Khaled Hussainey, Plymouth University UK Doaa Aly, University of Gloucestershire UK. 1–29.

- Alnabsha, A., Abdou, H. A., Ntim, C. G., & Elamer, A. A. 2018. Corporate boards, ownership structures and corporate disclosures: Evidence from a developing country. *Journal of Applied Accounting Research* 19(1): 20–41.
- Alsayegh, M. F., Rahman, R. A., & Homayoun, S. 2020. Corporate economic, environmental, and social sustainability performance transformation through ESG disclosure. *Sustainability (Switzerland)* 12(9): 3910.
- Amosh, H. Al, & Khatib, S. F. A. 2021. Corporate governance and voluntary disclosure of sustainability performance: the case of Jordan. *SN Business & Economics* 1(12): 165.
- Amran, A., Periasamy, V., & Zulkafli, A. H. 2014. Determinants of Climate Change Disclosure by Developed and Emerging Countries in Asia Pacific. *Sustainable Development* 22(3): 188–204.
- Arayssi, M., Jizi, M., & Tabaja, H. H. 2020. The impact of board composition on the level of ESG disclosures in GCC countries. *Sustainability Accounting, Management and Policy Journal* 11(1): 137–161.
- Bhatti, U., & Sulaiman, N. 2022. The Impact of Sustainability Practices on Share Performance with Mediation of Board Members Experience: A Study on Malaysian Listed Companies. *International Journal of Financial Studies* 11(1): 4.
- Birindelli, G., Dell'Atti, S., Iannuzzi, A. P., & Savioli, M. 2018. Composition and activity of the board of directors: Impact on ESG performance in the banking system. *Sustainability (Switzerland)* 10(12).
- Bursa Malaysia. 2015. *Sustainability Reporting Guide*.
- Bursa Malaysia. 2021. *Corporate Governance Guide 4th Edition*.
- Cheng, E. C. M., & Courtenay, S. M. 2006. Board composition, regulatory regime and voluntary disclosure. *The International Journal of Accounting* 41: 262–289.
- Disli, M., Yilmaz, M. K., & Mohamed, F. F. M. 2022. Board characteristics and sustainability performance: empirical evidence from emerging markets. *Sustainability Accounting, Management and Policy Journal* 13(4): 929–952.
- Duque-Grisales, E., & Aguilera-Caracuel, J. 2021. Environmental, Social and Governance (ESG) scores and financial performance of multilatinas: moderating effects of geographic international diversification and financial slack. *Journal of Business Ethics* 168(2): 315–334.
- Eagly, A. H., Johannesen-Schmidt, M. C., & Engen, M. L. Van. 2003. Transformational, transactional, and laissez-faire leadership styles: a meta-analysis comparing women and men. *Psychological Bulletin* 129(4): 569–591.
- Eccles, R. G., Ioannou, I., & Serafeim, G. 2012. The impact of a corporate culture of sustainability on corporate behavior and performance. *SSRN Electronic Journal*.
- Fama, E. F., & Jensen, M. C. 1983. Agency problems and residual claims. *Journal of Law* 26(2): 327–349.
- Fatemi, A., Glaum, M., & Kaiser, S. 2018. ESG performance and firm value: The moderating role of disclosure. *Global Finance Journal* 38: 45–64.
- Ferreira, S., Pereira, G. T., Manuel, E., & Branco, C. 2015. Sustainability reporting and assurance in Portugal. *Corporate Governance: The International Journal of Business in Society* 15(3): 281–292.
- García-Sánchez, I. M., Hussain, N., Khan, S. A., & Martínez-Ferrero, J. 2021. Assurance of corporate social responsibility reports: Examining the role of internal and external corporate governance mechanisms. *Corporate Social Responsibility and Environmental Management* 29(1): 1–18.
- Garzón-Jiménez, R., & Zorio-Grima, A. 2021. Effects of carbon emissions, environmental disclosures and CSR assurance on cost of equity in emerging markets. *Sustainability (Switzerland)* 13(2): 1–11.
- Gurol, B., & Lagasio, V. 2023. Women board members' impact on ESG disclosure with environment and social dimensions: evidence from the European banking sector. *Social Responsibility Journal* 19(1): 211–228.
- Hsu, Y. L., & Yang, Y. C. 2022. Corporate governance and financial reporting quality during the COVID-19 pandemic. *Finance Research Letters* 47: 1–13.
- Htay, S. N. N. 2012. Better boards towards higher profitability. *World Review of Business Research* 2(2): 149–163.
- Islam, R., Ali, M., & French, E. 2023. Director independence and its influence on corporate social responsibility decisions and performance. *Social Responsibility Journal* (ahead-of-print).
- Jamil, A., Ghazali, N. A. M., & Nelson, S. P. 2021. The influence of corporate governance structure on sustainability reporting in Malaysia. *Social Responsibility Journal* 17(8): 1251–1278.
- Kamaludin, K., Ibrahim, I., Sundarasan, S., & Faizal, O. V. A. 2022. ESG in the boardroom: evidence from the Malaysian market. *International Journal of Corporate Social Responsibility* 7(1).
- Kanadli, S. B., Alawadi, A., Kakabadse, N., & Zhang, P. 2022. Do independent boards pay attention to corporate sustainability? Gender diversity can make a difference. *Corporate Governance (Bingley)* 22(7): 1390–1404.
- Kee, H. W., Li, N. S., Sidik, V. N. M., Seng, N. F., & Suppiah, S. D. K. 2020. Corporate characteristics and ESG disclosures in Malaysian public-listed companies. *Humanities and Social Sciences Letters* 8(1): 91–109.
- Lestari, N. I. G., & Adhariani, D. 2022. Can intellectual capital contribute to financial and non-financial performances during normal and crisis situations? *Business Strategy and Development* 5(4): 390–404.

- Martínez-Ferrero, J., & Lozano, M. B. 2021. The nonlinear relation between institutional ownership and environmental, social and governance performance in emerging countries. *Sustainability (Switzerland)* 13(3): 1–16.
- Michelon, G., & Parbonetti, A. 2012. The effect of corporate governance on sustainability disclosure. *Journal of Management & Governance* 16: 477-509.
- MIDA. 2021. *Malaysia Investment Performance Report 2021*.
- Minichilli, A., Zattoni, A., & Zona, F. 2009. Making boards effective: An empirical examination of board task performance. *British Journal of Management* 20: 55–74.
- Mohammad, W. M. W., & Wasiuzzaman, S. 2021. Environmental, Social and Governance (ESG) disclosure, competitive advantage and performance of firms in Malaysia. *Cleaner Environmental Systems* 2: 100015.
- Mohammad, W. M. W., Zaini, R., & Kassim, A. A. M. 2022. Women on boards, firms' competitive advantage and its effect on ESG disclosure in Malaysia. *Social Responsibility Journal* 19(5): 930-948.
- Naciti, V. 2019. Corporate governance and board of directors: The effect of a board composition on firm sustainability performance. *Journal of Cleaner Production* 237: 1-8.
- Nicolo, G., Zampone, G., Sannino, G., & Tiron-Tudor, A. 2023. Worldwide evidence of corporate governance influence on ESG disclosure in the utilities sector. *Utilities Policy* 82: 1-14.
- Nuhu, Y., & Alam, A. 2023. Board characteristics and ESG disclosure in energy industry: evidence from emerging economies. *Journal of Financial Reporting and Accounting*.
- Pathan, S. 2009. Strong boards, CEO power and bank risk-taking. *Journal of Banking & Finance* 33(7): 1340–1350.
- Pereira, A. M. 2017. *Women on Board: Female Presence on the Board of Directors and Corporate Social Responsibility*. Washington: Georgetown University
- 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.
- PwC. 2022. *Positioning Corporate Malaysia for a sustainable future*. Available at <https://www.pwc.com/my/en/assets/publications/2022/pwc-cmm-positioning-corporate-malaysia-for-a-sustainable-future.pdf>
- Rahman, R. A., & Ali, F. H. M. 2006. Board, audit committee, culture and earnings management: Malaysian evidence. *Managerial Auditing Journal* 21(7): 783–804.
- Rahman, R. A., & Alsayegh, M. F. 2021. Determinants of Corporate Environment, Social and Governance (ESG) Reporting among Asian firms. *Journal of Risk and Financial Management* 14(4): 167.
- Raimo, N., Rella, A., Vitolla, F., Sánchez-Vicente, M.-I., & García-Sánchez, I.-M. 2021. Corporate social responsibility in the COVID-19 pandemic period: A traditional way to address new social issues. *Sustainability* 13(12): 6561.
- Rao, K., & Tilt, C. 2016. Board composition and corporate social responsibility: The role of diversity, gender, strategy and decision making. *Source: Journal of Business Ethics* 138(2): 327–347.
- Romano, M., Cirillo, A., Favino, C., & Netti, A. 2020. ESG (Environmental, social and governance) performance and board gender diversity: The moderating role of CEO duality. *Sustainability (Switzerland)* 12(21): 1–16.
- Saggar, R., & Singh, B. 2017. Corporate governance and risk reporting: Indian evidence. *Managerial Auditing Journal* 32(4–5): 378–405.
- Samara, I., Nandakumar, M. K., O'Regan, N., & Almoumani, H. M. 2023. Governance diversity: Its impact on strategic variation and results. *Strategic Change* 31(2): 29–42.
- Shamil, M. M., Shaikh, J. M., Ho, P.-L., & Krishnan, A. 2014. The influence of board characteristics on sustainability reporting. *Asian Review of Accounting* 22(2): 78–97.
- Sheren, M. 2022. Sustainability: From planning to practice: Can Southeast Asia's sustainability movement succeed? The Edge Malaysia.
- Soong, Y. Q., & Hooy, C. W. 2016. Does women directorship in Malaysian government-linked companies matters? *Journal of Contemporary Issues and Thought* 6: 83–92.
- Suttipun, M., & Yordudom, T. 2022. Impact of environmental, social and governance disclosures on market reaction: An evidence of top 50 companies listed from Thailand. *Journal of Financial Reporting and Accounting* 20(3–4): 753–767.
- Tahmid, T., Hoque, M. N., Said, J., Saona, P., & Azad, M. A. K. 2022. Does ESG initiatives yield greater firm value and performance? New evidence from European firms. *Cogent Business and Management* 9(1): 1-16.
- Wang, K. T., Kartika, F., Wang, W. W., & Luo, G. 2021. Corporate social responsibility, investor protection, and the cost of equity: Evidence from East Asia. *Emerging Markets Review* 47(January): 100801.
- Wasiuzzaman, S., & Mohammad, W. M. W. 2020. Board gender diversity and transparency of environmental, social and governance disclosure: Evidence from Malaysia. *Managerial and Decision Economics* 41(1): 145–156.
- Zahid, M., & Ghazali, Z. 2015. Corporate sustainability practices among Malaysian REITs and property listed companies. *World Journal of Science, Technology and Sustainable Development* 12(2): 100–118.

- Zahid, M., Rahman, H. U., Ali, W., Khan, M., Alharthi, M., Qureshi, M. I., & Jan, A. 2019. Boardroom gender diversity: Implications for corporate sustainability disclosures in Malaysia. *Journal of Cleaner Production* 244(October): 118683.
- Zainon, S., Ismail, R. F., Md Nawli, S., Mohamad Shafi, R., Misman, N., & Zakaria, N. B. 2020. Environmental, social and governance disclosures on financial performance of public listed companies in Malaysia. *Asia-Pacific Management Accounting Journal* 15(3): 87-107.
- Zhao, C., Guo, Y., Yuan, J., Wu, M., Li, D., Zhou, Y., & Kang, J. 2018. ESG and corporate financial performance: Empirical evidence from China's listed power generation companies. *Sustainability (Switzerland)* 10(8): 1-18.

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