




ORIGINAL

The effect of board of director diversity on company performance and the mediating role of director remuneration: Malaysia public companies' evidence

El efecto de la diversidad del consejo de administración en los resultados de la empresa y el papel mediador de la remuneración de los consejeros: Las empresas públicas de Malasia

Noraida Adila Che Mat¹ , Sri Sarah Maznah Mohd Salleh^{1,2}

¹Faculty of Business & Communication, Universiti Malaysia Perlis (UniMAP). Perlis, Malaysia.

²Centre of Excellence for Social Innovation and Sustainability (COESIS), Faculty of Business and Communication, Universiti Malaysia Perlis. Perlis, Malaysia.

Cite as: Che Mat NA, Maznah Mohd Salleh SS. The effect of board of director diversity on company performance and the mediating role of director remuneration: Malaysia public companies' evidence. Salud, Ciencia y Tecnología - Serie de Conferencias. 2025; 4:1240. <https://doi.org/10.56294/sctconf20251240>

Submitted: 30-03-2024

Revised: 18-07-2024

Accepted: 29-11-2024

Published: 01-01-2025

Editor: Dr. William Castillo-González 

ABSTRACT

Introduction: the board of director diversity plays a critical role in developing strategic options to improve company performance. The appropriate remuneration package for the director might bridge between the effectiveness of diversity of board and enhancing company performance.

Objective: the study aims to examine the effect of board of director diversity on company performance, with a particular focus on the mediating role of director remuneration.

Method: the nature of the study is quantitative. The current study focuses on the Malaysia public listed companies. The study used panel data from period 2015 to 2021 using secondary data which extracted from Bloomberg database and company annual report. The study utilized 601 sample observation.

Result: data was analysed through Stata software and the findings reveal a significant positive relationship between board diversity (gender, ethnicity, tenure) and company performance measured by Economic Value Added (EVA) and Environmental, Social and Governance (ESG) scores. Additionally, director remuneration is found to significantly mediate the impact of board diversity on EVA, although its mediation effect of ESG performance is less pronounced. These results highlight the importance of fostering diverse boards and implementing fair remuneration practices to enhance both financial and non-financial performance in companies.

Conclusion: this study provides valuable insights for policymakers, stakeholders and investors aiming to improve corporate governance practices in Malaysia public listed companies.

Keywords: Board of Director Diversity; Company Performances; Mediating; Director Remuneration; Malaysia Public Listed Company.

RESUMEN

Introducción: la diversidad del consejo de administración desempeña un papel fundamental en el desarrollo de opciones estratégicas para mejorar los resultados de la empresa. El paquete retributivo adecuado para el consejero puede servir de puente entre la eficacia de la diversidad del consejo y la mejora de los resultados de la empresa.

Objetivo: el estudio pretende examinar el efecto de la diversidad del consejo de administración en el rendimiento de la empresa, con especial atención al papel mediador de la remuneración de los consejeros.

Método: la naturaleza del estudio es cuantitativa. El presente estudio se centra en las empresas cotizadas en bolsa de Malasia. El estudio utilizó datos de panel del periodo 2015 a 2021 utilizando datos secundarios

extraídos de la base de datos Bloomberg y del informe anual de la empresa. El estudio utilizó 601 muestras de observación.

Resultados: los datos se analizaron mediante el software Stata y los resultados revelan una relación positiva significativa entre la diversidad del consejo (género, etnia, mandato) y el rendimiento de la empresa medido por el Valor Económico Añadido (EVA) y las puntuaciones ambientales, sociales y de gobierno (ESG). Además, se observa que la remuneración de los consejeros influye significativamente en el impacto de la diversidad de los consejos de administración sobre el EVA, aunque su efecto sobre los resultados ESG es menos pronunciado. Estos resultados ponen de relieve la importancia de fomentar la diversidad en los consejos de administración y de aplicar prácticas de remuneración justas para mejorar los resultados financieros y no financieros de las empresas.

Conclusión: este estudio proporciona información valiosa para los responsables políticos, las partes interesadas y los inversores que aspiran a mejorar las prácticas de gobierno corporativo en las empresas que cotizan en bolsa en Malasia.

Palabras clave: Diversidad del Consejo de Administración; Rendimiento de la Empresa; Mediación; Remuneración de los Consejeros; Empresas Cotizadas en Bolsa de Malasia.

INTRODUCTION

Company performance, both financial and non-financial, is a critical indicator of company health and success. Financial performance measures such as profitability, return on assets, and stock market performance provide tangible evidence of a company's success in generating wealth for its shareholders. Non-financial performance indicators, including employee satisfaction, innovation and corporate social responsibility (CSR), reflect a company's broader impact on its stakeholder and society.⁽¹⁾ Globally, there is growing recognition that focusing solely on financial metrics can provide an incomplete picture of a company's performance. Therefore, a holistic approach that includes both financial and non-financial performance is essential for sustainable growth and long-term success.

The global consent highlights that integrating financial and non-financial metrics can lead to a more comprehensive understanding of a company's operations and its potential for future success. For instance, a company that excels financially but neglects its social responsibilities or employee welfare may face reputational risks and long-term sustainability issues. Conversely, companies that invest in CSR and maintain high employee satisfaction often could enhanced financial performance due to increased customer loyalty and reduced turnover rates.⁽²⁾

In the context of public listed companies in Malaysia, several issues arise when examining the factors that influence both financial and non-financial performance. One key area of focus is the diversity of the board of directors. Board diversity, encompassing gender, ethnicity, and tenure is increasingly seen as a critical factor in driving company performance. Diverse boards are believed to enhance decision-making processes by bringing varied perspectives and experiences to the table, leading to more innovative and effective governance.⁽³⁾

Despite the recognized benefits of board diversity, many Malaysian companies still struggle with achieving it. The Malaysian Code on Corporate Governance (MCCG) has introduced recommendations to increase board diversity, yet the progress is underperforming. As of recent statistics, women hold about 26 % of board seats in Malaysia's top 100 public listed companies, indicating significant room for improvement.⁽⁴⁾

Another crucial factor influencing company performance is director remuneration. The director pay including salaries, bonuses, and other benefits, play a significant role in attracting and retaining talented board members. However, there is ongoing debate about adequacy and fairness of these remuneration packages. Excessive remuneration may lead to conflicts of interest and reduced motivation, whereas insufficient remuneration may fail to attract the necessary talent.⁽⁵⁾

This study aims to explore the mediating role of director remuneration in the relationship between board diversity and company performance. Understanding this relationship is crucial because it can reveal whether appropriate compensation strategies enhance the positive effects of board diversity or if they present challenges that need to be addressed. By examining how board diversity and director remuneration collectively impact both financial and non-financial performance, this study seeks to provide practical recommendations for improving corporate governance practices in Malaysia public listed companies.

The significance of this study lies in its potential to offer valuable insights into how diverse boards and fair remuneration practices can drive better overall company performance. This understanding is vital for ensuring that public listed companies in Malaysia can compete effectively in the global market, attract investment and contribute to sustainable economic growth.

Literature review and hypotheses development

Board Diversity and Company Financial Performance

Board Gender Diversity and Company Financial Performance

Board gender diversity has become a significant topic in corporate governance, where many studies showing its positive impact on non-financial performance. Recent research by Laique, Abdullah⁽⁶⁾ and Trinh, Trinh⁽⁷⁾ demonstrates that gender-diverse boards often exhibit better governance and decision-making processes, leading to improved financial outcomes. However, despite the recognized benefits, many companies struggle to achieve sufficient gender diversity on their boards. In Malaysia, women hold 28 % of board seats in the top public listed companies, just below 30 % as recommended by MCCG.⁽⁴⁾ This shortfall may limit the innovative potential and comprehensive decision-making that fully diverse boards offer. Empirical evidence from Juliana⁽⁸⁾ found that companies with greater female board representation had higher return on assets (ROA) and return on equity (ROE). Additionally, gender-diverse boards may also positively impact economic value added (EVA), a measure of financial performance that captures the true economic profit of a company by considering the cost of capital. Resources dependency theory and stakeholder theory suggest that women directors bring unique resources and network, enhancing board capabilities and considering a broader range of stakeholder interests, respectively.^(9,10) Stakeholder view on higher return on investment, a more inclusive work environment, and better product and services. Thus, it is hypothesized that:

H1a: there is a positive relationship between board gender diversity and the financial performance of public listed companies in Malaysia

Board Ethnicity Diversity and Company Financial Performance

Board ethnicity diversity has been critically examined for its potential to enhance company financial performance by bringing varied perspectives and experiences that drive better decision-making and innovation. Studies by^(11,12,13) provide evidence that ethnically diverse boards can improve financial outcomes through enhanced understanding diverse markets and customer bases. Specifically, Bagh, Khan⁽¹⁴⁾ found that companies with greater ethnic diversity on their board exhibited higher return on assets (ROA) and return on equity (ROE), suggesting a direct link between diversity and financial performance. Resource dependency theory support this, indicating that diverse boards provide a broader range of resources, networks and insights, enhancing strategic decision-making and market reach.^(9,10) Stakeholder theory further posits that ethnically diverse boards are better positioned to address the interests of a broad range of stakeholders, ROE, economic value added (EVA) is another financial performance measure that captures the true economic profit of a company by considering the cost of capital. Empirical studies suggest that ethnically diverse boards can contribute to better performance in term of EVA, as they bring critical viewpoints that drive long-term value creation. Despite these benefits, many companies still lack sufficient ethnic diversity, potentially limiting their financial performance and competitive edge.⁽¹⁵⁾ Given this insight, it is hypothesized that board ethnicity diversity positively influences the financial performance of public listed companies emphasizing the need for greater diversity to harness these advantages.

H1b: There is a positive relationship between board ethnicity diversity and the financial performance of public listed companies.

Board Tenure Diversity and Company Financial Performance

Board tenure diversity which involves having directors with varying lengths of service is crucial for balancing experience and fresh perspectives, thereby enhancing financial performance. Long tenure director provide deep company specific knowledge and stability, while newer directors bring innovative ideas and challenge the status quo, resulting in more dynamic governance. Sun and Bhuiyan⁽¹⁶⁾ indicates that a mix of tenure improves board oversight and decision-making quality, boosting financial performance. Similarly, Huang and Hilary⁽¹⁷⁾ found that tenure diversity mitigates groupthink, fostering comprehensive evaluation of management proposals and enhancing financial outcomes. Empirical evidence support these finding with Ilona⁽¹⁸⁾ showing that companies with greater tenure diversity on their board perform better financially as measured by return on assets (ROA) and return on equity (ROE). Further, diverse board tenures contribute to better economic value added (EVA), a metric that captures the true economic profit of a company by considering the cost of capital. Thus, it is hypothesized that board tenure diversity positively influences the financial performance of public listed companies.

H1c: There is a positive relationship between board tenure diversity and the financial performance of public listed companies.

Board Diversity and Company Non-Financial Performance

Board Gender Diversity and Company Non-Financial Performance

Board gender diversity has gained significant attention for its role in enhancing company non-financial performance, particularly through Environmental, Social and Governance (ESG) metrics. Recent studies by

Laique, Abdullah⁽⁶⁾ and Trinh, Trinh⁽⁷⁾ highlight that gender-diverse boards are more effective in implementing sustainable practices and improving ESG performance. Diverse boards contribute varied perspectives and values, leading to more comprehensive and socially responsible decision-making. Empirical studies, such as those by Putri, Suharman⁽¹⁹⁾, show that firm with higher female board representation achieve superior ESG scores, especially in environmental and social dimensions. Theoretical frameworks like stakeholder theory suggest that gender-diverse boards better address the interests of a broad range of stakeholders, enhancing overall ESG performance.⁽²⁰⁾ This relationship is particularly significant for public listed companies in Malaysia, where efforts to improve board diversity are ongoing. Given these insights., it is hypothesized that board gender positively influences the non-financial performance of public listed companies in Malaysia.

H2a: there is positive relationship between board gender diversity and the non-financial performance of public listed companies in Malaysia.

Board Ethnicity Diversity and Company Non-Financial Performance

Ethnicity diversity bring together a wide array of cultural perspectives and experiences, which can lead to more comprehensive and inclusive decision-making.^(11,12,13) demonstrate that ethnically diverse board are better equipped to address complex social and environmental challenges, improving ESG outcomes. The stakeholder theory supports this by suggesting that board reflecting a wide range of stakeholder backgrounds can better fulfil the varied needs and expectations of those stakeholders, thereby boosting ESG performance.^(9,10) Additionally, the resource dependency theory posits that board members with diverse ethnic backgrounds provide unique resources and networks, enhancing a company's ability to respond to ESG issue.^(9,10) Despite these recognized benefits, many companies struggle to achieve significant ethnic diversity on their boards, which can hinder their potential ESG performance and overall sustainability. Therefore, it is proposed that increasing ethnic diversity on boards can lead to better non-financial performance for public listed companies.

H2b: There is a positive relationship between board ethnicity diversity and the non- financial performance of public listed companies.

Board Tenure Diversity and Company Non-Financial Performance

Board tenure diversity refers to the range of differences in the length of service among directors on a company's board. It is increasingly considered important in corporate governance as it brings a mix of experience and fresh perspectives, which can enhance decision-making and strategic oversight. Previous studies have shown that diverse tenure on boards can lead to improved non-financial indication such as corporate social responsibility (CSR), innovation and stakeholder relations. For instance, research by^(11,12,13) suggests that a mix of seasoned and newer board members can foster a more dynamic and innovative corporate culture. Moreover, Dakhli⁽²¹⁾ and Yan, Khan⁽²²⁾ found that companies with diverse board tenures often exhibit higher level of CSR activities, which positively influence their reputation and stakeholder engagement. Therefore, it is hypothesized that:

H2c: There is a positive relationship between board tenure diversity and the non-financial performance of public listed companies.

Board Diversity and Director Remuneration

Board Gender Diversity and Director Remuneration

Board gender diversity, which involves having both male and female directors, plays a significant role in shaping corporate governance and performance. Diverse boards are believed to enhance decision-making through varied perspectives and experiences. Empirical evidence suggests that gender diversity can also affect director remuneration. For instance, research by Lintelo⁽²³⁾ indicates that gender-diverse boards may implement more equitable and performance-based pay structures. Moreover, Chen and Hassan⁽²⁴⁾ found that female directors often contribute to stronger governance practices, which can lead to more effective monitoring and consequently, remuneration policy that align with company performance. therefore, it is hypothesized that:

H3a: Board gender diversity is positively associated with director remuneration.

Board Ethnicity Diversity and Director Remuneration

Board ethnicity diversity, involving directors from various ethnic backgrounds, is increasingly recognized as vital for comprehensive corporate governance and decision-making. Ethnic diversity on boards brings a range of perspectives and cultural insights, which can improve the board's ability to understand and respond to diverse markets and stakeholders. Previous studies have indicated that ethnically diverse board may influence director remuneration practices. Gupta, Lam⁽²⁵⁾ found that firm with ethnically diverse board often implement more equitable and performance-based pay structures. Dezsó, Li⁽²⁶⁾ highlight that diversity in leadership can foster an inclusive environment that support merit-based advancement, extending to fair remuneration policies. Dwekat, Seguí-Mas ⁽²⁷⁾ discovered that ethnic diversity on boards is associated with enhanced corporate governance, resulting in better alignment of director remuneration with company performance. Similarly, Abdullah, Yusoff

⁽²⁸⁾ noted that diversity lead to comprehensive governance practices that influence executive compensation strategies. Therefore, it is hypothesized that:

H3b: Board ethnicity diversity is positively associated with director remuneration.

Board Tenure Diversity and Director Remuneration

Board tenure diversity, which encompasses varying lengths of service among board members, is recognized as an important factor in effective corporate governance. This diversity brings a balance of experience and fresh perspectives to board deliberations. Studies suggest that diverse tenure among directors can influence remuneration practices. For instance, Schuchardt and Kammerlander⁽²⁹⁾ found that tenure diversity contributes to more comprehensive monitoring and diverse viewpoints, leading to more equitable and performance-based director remuneration. This is supported by other researcher such as Sun and Bhuiyan⁽¹⁶⁾, who argue that tenure diversity enhances the board's ability to provide effective oversight thus impacting remuneration policies positively. Similarly, Sun and Bhuiyan⁽¹⁶⁾ and Akhtar, Tareq⁽³⁰⁾ suggest that a mix of seasoned and newer directors enhances the boards oversight capabilities, ensuring that remuneration policies align with the company's strategic goal. ⁽¹¹⁻¹³⁾ highlight that diversity in board tenure drives merit-based compensation policies, a view also echoed who found that diverse tenure improve governance by incorporating a range of insights and experiences. Recent research by Gonzalez, Arevalo Lizarazo⁽³¹⁾, further supports the notion that tenure diversity strengthens governance and fosters a remuneration structure that rewards directors based on their contributions and performance. Hence it is hypothesized that:

H3c: Board tenure diversity is positively associated with director remuneration.

Director Remuneration and Company Performances

Director Remuneration and Company Financial Performance

Director remuneration which encompasses the compensation received by board members, is a critical component of corporate governance that can significantly influence company financial performance. Prior research indicates that well-structured director remuneration can align the interests of directors with those shareholder promoting decisions that enhance financial performance.⁽³²⁾ Specifically, studies by Graziano and Rondi⁽³³⁾ suggest that performance-based remuneration, which includes bonuses and stock options tied to EVA, can motivate directors to pursue strategies that improve financial outcomes. Moreover, Akhtar, Tareq⁽³⁰⁾ argue that remuneration linked to long-term financial metrics such as EVA encourages sustainable growth and mitigates the risks association with short-term profit maximization. Therefore, it is hypothesized that:

H4a: Director remuneration is positively associated with company financial performance, particularly measured by Economic Value added.

Director Remuneration and Company Non-Financial Performance

The compensation received by board members may influence a company non-financial performance like environmental social and governance performances. As non-financial performance reflects a company's commitment to sustainable practices, social responsibility and ethical governance, which is important for the stakeholder.⁽³⁴⁾ Research indicates that performance-based remuneration structure can incentivize directors to prioritize ESG goals alongside financial targets. Specifically, previous scholars suggested that incorporating ESG metrics into remuneration policies can motivate directors to adopt strategies that enhance company's sustainability and social impact. Additionally, Golovko⁽³⁵⁾ found that companies linking executive compensation to ESG performance tend to exhibit better overall ESG outcomes. This alignment encourages a long-term perspective and responsible business practices, addressing the interests of a broader range of stakeholders. Therefore, it is hypothesized that:

H4b: Director remuneration is positively associated with company non-financial performance.

The Mediating Effect of Director Remuneration

Director Remuneration mediate the relationship between board of diversity and Company Financial Performance

As diverse board bring various perspectives, skills and experiences which contribute to more effective decision-making and strategic oversight.^(11,12,13,14) Board of director diversity, for instance gender, ethnicity and tenure has been linked to better financial performance and governance practices due to diverse board enhances a company understanding specifically in diverse market and bring more innovation as the board from experienced and newer director which is balance continuity and fresh perspective, contributing to robust governance.^(29,34)

Director remuneration which includes compensation received by board members is critical inn aligning directors' interest with those of shareholders and promoting strategies that enhance company performance. Performance-based remuneration, where incentives directors to focus on long-term value creation above the

cost of capital.⁽³²⁾ By motivating directors through compensation structures that reward long-term financial metrics such as EVA, director remuneration can act as a mediating variable between board diversity and company financial performance. Research indicates that performance-based compensation can leverage the unique perspectives of a diverse board enhancing overall governance and financial outcomes.⁽³³⁾

The Resource Dependence Theory posits that organizations depend on external resources and that board members can provide essential resources such as information, skills, and access to key stakeholders.⁽³⁶⁾ Diverse boards can offer a wider array of these resources, thereby improving decision-making and strategic oversight. When director remuneration is structured to align with long-term performance goals, it further enhances the effectiveness of these diverse resources, driving superior financial performance measured by EVA. Therefore, it is hypothesized that:

H5a: director remuneration mediates the relationship between board diversity (gender, ethnicity and tenure) and company financial performance (EVA).

Director Remuneration mediate the relationship between board of diversity and Company Non-Financial Performance

Board diversity, encompassing gender, ethnicity and tenure, enhances corporate governance and overall company performance through the experience and skills to decision-making and strategic oversight. This diversity significantly improves a company’s ESG performance, reflecting a commitment to sustainable practices, social responsibility and ethical governance.^(11,12,13,14,29)

Director remuneration, which includes compensation received by board align with director interest with those stakeholders and promotes strategies that enhance company performance. Performance-based remuneration linked to ESG metrics incentives to priorities sustainability and ethical practices.⁽³²⁾ As a mediating variable, director remuneration enhances the impact of board diversity on non-financial performance by motivating directors to leverage their diverse perspectives for improved ESG outcomes.

The resources dependence theory suggest that diverse boards provide essential resources, enhancing decision-making and strategic oversight.⁽³⁶⁾ When director remuneration aligns with long-term ESG goals, it amplifies these resources effectiveness, driving superior non-financial performance. Similarly, stakeholder theory posits that diverse boards better understand and address stakeholder concerns and performance-based remuneration ensure director consider broader stakeholder interest, leading to improved ESG performance.^(9,10) Therefore, it is hypothesized that:

H5b: director remuneration mediates the relationship between board diversity (gender, ethnicity and tenure) and company non-financial performance (ESG).

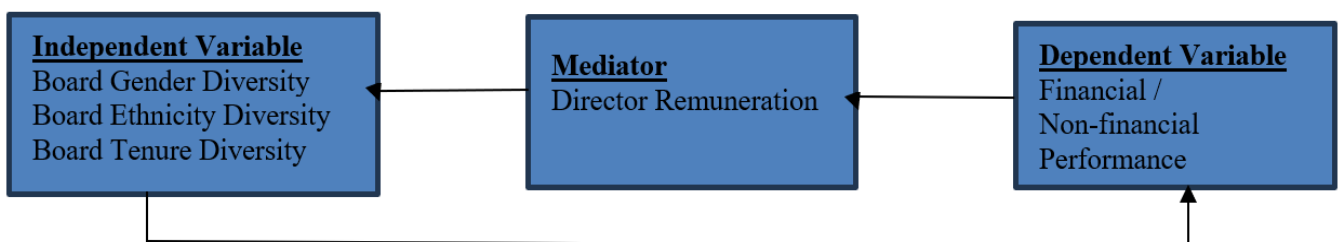


Figure 1. Theoretical Framework

METHOD

Sample and Data Sources

The study population comprised 965 companies which is publicly traded in Bursa Malaysia main market. The data collected from period of year 2015 to year 2021. The data gathering from secondary data using Bloomberg database and company annual report. However, due to incomplete data, final sample of 86 companies which comprising 601 company observation was utilized for this study. Table 1 below provide a detailed computation for company sample in this study.

Table 1. Sample computation for company based on filtering process from Bloomberg database		
Sample computation for year 2015-2021	Company's	Company-year observation
Total population	965	6755
Less: Companies without ESG score data	862	6034
Companies with ESG score data	103	721
Less: Companies without complete ESG score data	17	119

Total sample of companies	86	602
Less: Company that did not provide complete information		1
Total Final Sample	86	601

Source: Bloomberg Database, 2022

Variable Measurement

The definition of the variables has been defined as summary table 2 below.

Variables	Measurement
Dependent	
Company Financial Performance	Economic Value Added (EVA) =NOPAT- (WACC x Invested Capital)
Company Non-Financial Performance	Environmental Social Governance (ESG) = Disclose score (Bloomberg database)
Independent	
Board of Director Gender Diversity	Blau’s heterogeneity index $1 - \sum xi^2 / (\sum xi)^2$
Board of Director Ethnicity Diversity	Blau’s heterogeneity index $1 - \sum xi^2 / (\sum xi)^2$
Board of Director Tenure Diversity	Blau’s heterogeneity index $1 - \sum xi^2 / (\sum xi)^2$
Mediating	
Director Remuneration	Total remuneration of executive director and non-executive directors
Control	
Board Size	Number of Board of Director
Firm Size	Log Total Asset
Leverage	Total Debt to Total Asset

Empirical model

In order to test the relationship among the independent, dependent, and mediating variables association, the study employed the following models.

$$EVA = \beta_0 + \beta_1 BGD_{it} + \beta_2 BED_{it} + \beta_3 BTD_{it} + \beta_4 BS_{it} + \beta_5 FS_{it} + \beta_6 LEV_{it} + \epsilon_{it} \text{ (H1a, H1b, H1c)}$$

$$ESG = \beta_0 + \beta_1 BGD_{it} + \beta_2 BED_{it} + \beta_3 BTD_{it} + \beta_4 BS_{it} + \beta_5 FS_{it} + \beta_6 LEV_{it} + \epsilon_{it} \text{ (H2a, H2b, H2c)}$$

$$DR = \beta_0 + \beta_1 BGD_{it} + \beta_2 BED_{it} + \beta_3 BTD_{it} + \beta_4 BS_{it} + \beta_5 FS_{it} + \beta_6 LEV_{it} + \epsilon_{it} \text{ (H3a, H3b, H3c)}$$

$$EVA = \beta_0 + \beta_1 DR_{it} + \beta_2 BS_{it} + \beta_3 FS_{it} + \beta_4 LEV_{it} + \epsilon_{it} \text{ (H4a)}$$

$$ESG = \beta_0 + \beta_1 DR_{it} + \beta_2 BS_{it} + \beta_3 FS_{it} + \beta_4 LEV_{it} + \epsilon_{it} \text{ (H4b)}$$

$$EVA = \beta_0 + \beta_1 BGD_{it} + \beta_2 BED_{it} + \beta_3 BTD_{it} + \beta_4 DR_{it} + \beta_5 BS_{it} + \beta_6 FS_{it} + \beta_7 LEV_{it} + \epsilon_{it} \text{ (H5a)}$$

$$ESG = \beta_0 + \beta_1 BGD_{it} + \beta_2 BED_{it} + \beta_3 BTD_{it} + \beta_4 DR_{it} + \beta_5 BS_{it} + \beta_6 FS_{it} + \beta_7 LEV_{it} + \epsilon_{it} \text{ (H5b)}$$

Where EVA= Economic Value Added, ESG= Environmental Social Governance, DR= Director Remuneration, BGD =Board Gender Diversity, BED= Board Ethnicity Diversity, BTD= Board Tenure Diversity, BS=Board Size, FS=Firm Size, Lev=Leverage

RESULTS AND DISCUSSION

Variables	Mean	Min	Max	SD
EVA	-296,382	-7884,820	6962,910	1114,470
ESG	34,775	9,920	64,050	11,631
BGD	0,221	0,000	0,600	0,122
BED	0,462	0,000	0,740	0,176
BTD	0,232	0,000	0,690	0,202
DR	15,772	12,230	19,140	1,237
BS	8,860	4,000	18,000	2,005
FS	16,247	12,030	20,600	1,682
LEV	0,530	0,050	1,340	0,218

The dependent variable of EVA has a mean of (-296,382) and a standard deviation of (1114,47). The mean

value for EVA is highest indicated that company operating profit is not adequate to cover the capital cost which is resulting poor financial performance where at the same time affect stock price and overall value. The second dependent variable is ESG, where mean value shows (34,77) company concern about their overall health and long-term success. The standard deviation shows (11,63). As for the independent variable, board gender diversity shows the mean is (0,221), with a standard deviation of (0,122). Board ethnicity diversity (BED) shows the mean is (0,462), with a standard deviation of (0,176). Board tenure diversity (BTD) shows the mean is (0,232), with the standard deviation (0,202). The mean for mediating variable director remuneration (DR) is (15,772) where the standard deviation is (1,237). The control variable for this study is board size (BS), firm size (FS) and leverage (LEV) with mean value (8,860), (16,247) and (0,530).

Table 4 presents variance inflation factors (VIF) for the study. The VIF is tested to detect the presents of multicollinearity issue in the study. Hair et al. (2006) stated that there is exists multicollinearity issue if VIF is more than 10. Therefore, table 4 shows there is no evidence of multicollinearity issue in the study as each of the variable had a VIF below 10, with the highest VIF value (1,44) and the lowest tolerance (0,696) recorded in firm size (FS).

Table 4. Variance inflation factor

	EVA		ESG	
	VIF	1/VIF	VIF	1/VIF
FS	1,41	0,709	1,41	0,709
DR	1,38	0,724	1,38	0,724
LEV	1,28	0,784	1,28	0,784
BS	1,15	0,870	1,15	0,870
BTD	1,11	0,901	1,11	0,901
BGD	1,10	0,910	1,10	0,910
BED	1,07	0,932	1,07	0,932
Mean VIF	1,21		1,21	

Table 5. The impact of Independent and Control Variables on EVA

EVA	Coefficient	Robust Std. Err.	T	P > t
Independent				
		Board of Director Diversity		
BGD	1008,694**	408,345	2,47	0,014
BED	626,706**	242,462	2,58	0,010
BTD	571,840**	255,712	2,24	0,026
Control				
BS	-12,726	25,881	-0,49	0,623
FS	-187,207***	32,166	-5,82	0,000
LEV	273,878	277,116	0,99	0,323
Cons	2067,21	488,573	4,23	0,000
Mean VIF	1,21			
R-squared	0,1320			
Breusch - Pagan / Cook- Weisberg Test	0,0000			
Wooldridge Test	0,4595			
Sig 1 % =***, Sig 5 % = **, Sig 10 % =*				

Table 5 presented the result for impact on board of director diversity and company financial performance. The analysis demonstrates that board diversity in term of gender, ethnicity and tenure has a positive and significant impact on a company’s financial performance as measured by Economic value added (EVA).⁽³⁷⁾ There is significantly positive at 5 % between board gender diversity (BGD) and EVA. This suggests that gender diversity may be more effective in governance and strategic decision-making leading to increase the company financial performance. Studies by ^(38,39) shown that gender diversity on board can lead to improved financial outcomes due to enhanced governance practices, risk management and innovative approaches.

Similarly, there is positive and significant 5 % coefficient for board ethnicity diversity (BED) indicates that greater ethnic diversity within the board correlates with higher EVA. This finding implies that ethnic diversity can enhance board discussions and decision-making processes through a broader range of experience and cultural insight. This result is similar with the scholars Grad⁽⁴⁰⁾ and Torres, Bustamante-Ubilla⁽⁴¹⁾ who found that ethnic diversity contributes to improve financial performance by enhancing creativity, reducing groupthink and improve stakeholder engagement.

Furthermore, board tenure diversity (BTD) shows positive significant at 5 % on EVA. This shows that having tenure diversity will be beneficial as longer tenure will have more experiences while the newer will bring fresh idea and innovative to the company. Previous scholars indicated that tenure diversity enhance board effectiveness through combination of stability and innovation which ultimately increase the financial performance.^(42,43)

Among the control variable, board size (BS) and Leverage (LEV) do not show significant impact on EVA, while firm size (FS) negatively impacts EVA, suggesting that larger company may face challenges which will impact their financial performance.

ESG	Coefficient	Robust Std. Err.	t	P > t
Independent				
BGD	24,423***	3,654	6,68	0,000
BED	9,211***	2,146	4,29	0,000
BTD	-12,096***	2,199	-5,50	0,000
Control				
BS	0,362	0,266	1,36	0,174
FS	0,886***	0,275	3,22	0,001
LEV	0,039	2,221	0,02	0,986
Cons	10,308	4,486	2,30	0,022
Mean VIF	1,21			
R-squared	0,1896			
Breusch - Pagan / Cook-Weisberg Test	0,5721			
Wooldridge Test	0,0000			
Sig 1 % =***, Sig 5 % = **, Sig 10 % =*				

Table 6 shows analysis result between independent, control variable on ESG performance. The result shows positive relationship between board gender diversity (BGD) and environmental, social and governance (ESG) performance. The coefficient for BGD is 24,423 which is significant at the 1 % level. This indicates that increasing number of women on board is associated with higher ESG scores. Previously, scholars found that gender diverse boards are more likely to engage in CSR activities, better risk management which enhance ESG outcomes.⁽⁴⁴⁾

The coefficient for board ethnicity (BED) is 9,211 also at the level of 1 % significant. This shows that ethnicity of diverse board contributes positively to ESG performance. Diverse ethnic backgrounds will provide broader range of perspectives and experience, fostering innovative approaches to social and environmental issues. Researcher like Grad⁽⁴⁰⁾ and Torres, Bustamante-Ubilla⁽⁴¹⁾ indicated that having a diverse board in term ethnicity more effective in stakeholder engaging and CSR initiatives which ultimately increase ESG rating and improved decision-making.

However, the analysis shows there is different result between board tenure diversity (BTD) and ESG performances. The result indicates that the coefficient is -12,096 which is significant at 1 % level which mean a negative relationship with ESG performance. therefore, having a wide range of board tenures might lead to conflicts and inconsistencies in implement ESG policies. A mix of long and short tenure can lead to differing priorities and resistance to change which can delay the ESG effectiveness strategies. This has been proven in studies by ^(42,43) where, tenure diversity can bring stability and fresh perspectives, but too much diversity in tenure can create challenges in decision-making and policy implementation.

Other variables such like BS, FS and LEV has been considered. while BS and LEV had no significant impact on ESG. Firm size had a positive relationship with ESG performances.

DR	Coefficient	Robust Std. Err.	t	P > t
Independent				
BGD	-1,286***	0,350	-3,68	0,000
BED	-0,856***	0,246	-3,48	0,001
BTD	0,925***	0,230	4,03	0,000
Control				
BS	0,102***	0,022	4,68	0,000
FS	0,246***	0,037	6,67	0,000
LEV	1,063***	0,261	4,07	0,000
Cons	10,779	0,444	24,28	0,000

Mean VIF	1,13
R-squared	0,2757
Breusch - Pagan / Cook- Weisberg Test	0,3136
Wooldridge Test	0,0010
Sig 1 % =***, Sig 5 % = **, Sig 10 % =*	

The analysis show that BGD has a significant negative relationship with director remuneration (DR). The coefficient for BGD is -1,286 with 1 % significant level. This means that increasing gender diversity on the board is associated with lower director remuneration. Recent study support this finding such like Torres, Bustamante-Ubilla⁽⁴¹⁾ who found that board with more gender diversity tend to have more equitable pay structures, reducing excessive director remuneration. Besides, diverse gender in board more likely to implement compensation policies that align with broader stakeholder interests, which can lead to control more on remuneration practices.⁽⁴⁴⁾

BED also shows negative significant relationship with DR which is -0,856 at 1 %. This is in line with the study conducted by Grad⁽⁴⁰⁾ and Torres, Bustamante-Ubilla⁽⁴¹⁾ which indicating that diverse board in ethnic tend to adopt more inclusive and fair remuneration practices. Thus, this will lead to more balanced and excessive director pay. Conversely, the coefficient for BTD is 0,925 which is positive significant at 1 % with the director remuneration. Board with mix tenure length may have higher director remuneration.^(38,39,41) suggested that tenure diversity will increase the remuneration of the director as the director have more experience compare to the newer members. For the control variable, it shows that all the control variable has significant positive impact on the director remuneration. larger board size, bigger firm size and higher leverage associated with higher director pay which is increase the responsibilities and complexities to manage larger and high leverage company.

Table 8 shows the analysis between DR and EVA. The result shown that DR is negatively significant influence by EVA which is -162,447 at 1 %. The indicated that higher director remuneration is associated with lower EVA. The excessive remuneration could be detrimental the company value. This similar with the study by Torres, Bustamante-Ubilla⁽⁴¹⁾, who found that higher director pays often lead to agency problem, where director prioritize personal gains over company performance thereby will reduce EVA. Moreover, Kok, van Schalkwyk⁽⁴⁵⁾ in South Africa context mentioned that, executive remuneration is not directly related to firm profitability, which aligns with negative impact on EVA.

EVA	Coefficient	Robust Std. Err.	t	P > t
Independent				
DR	-162,447***	50,117	-3,24	0,001
Control				
BS	-3,010	25,610	-0,12	0,906
FS	-150,556***	28,366	-5,31	0,000
LEV	496,55	275,691	1,80	0,072
Cons	4475,382	809,117	5,53	0,000
Mean VIF	1,13			
R-squared	0,1015			
Breusch - Pagan / Cook- Weisberg Test	0,3136			
Wooldridge Test	0,0010			
Sig 1 % =***, Sig 5 % = **, Sig 10 % =*				

Similarly, there is a significant negative relationship between DR and ESG performance. the coefficient for DR is -1,114 significant at the 1 % level. This implies that higher director remuneration is linked to the lower ESG scores. This relationship can be attributed to director to focus more on financial incentives rather than long term sustainability goals. Previous scholars stated that higher remuneration can distract director on ESG practices goals.^(40,41,45) In addition, Torres, Bustamante-Ubilla⁽⁴¹⁾ and Laique, Abdullah⁽⁶⁾ found that commitment to social responsibility are crucial in determining director remuneration and higher pay might reduce focus on ESG practices.

The Sobel-Goodman mediation test results indicate that director remuneration (DR) mediates the relationship between board diversity and Economic Value Added (EVA). The mediation effect of director remuneration estimates that 243,768 with standard error of 85,574 and z-value of 2,849 which is significant at 1 % for board gender diversity (BGD) and economic value added. This significant positive mediation effect suggests that gender diversity on board improves EVA through its impact on director remuneration. this aligns with studies showing that gender-diverse board often lead to more equitable and performance-aligned compensation

practices which in turn positively impact financial performance.⁽⁶⁾

ESG	Coefficient	Robust Std. Err.	t	P > t
Independent			Board of Director Diversity	
DR	-1,114***	0,425	-2,62	0,009
Control				
BS	0,675**	0,298	2,26	0,024
FS	1,180***	0,359	3,29	0,001
LEV	4,840	2,486	1,95	0,052
Cons	24,599	6,102	4,03	0,000
Mean VIF	1,13			
R-squared	0,0599			
Breusch - Pagan / Cook- Weisberg Test	0,3136			
Wooldridge Test	0,0010			

Sig 1 % =***, Sig 5 % = **, Sig 10 % =*

Sobel-Goodman	Est	Std Err	z	P > z
BGD	243,768	85,574	2,849	0,004
BED	121,442	49,950	2,431	0,015
BTD	-175,359	55,798	-3,143	0,002

For board ethnicity diversity (BED), the mediation effect estimate is 121,442 with significant at 5 % level. This indicates that ethnic diversity on boards also positively affect EVA through its influence on director remuneration. Research by Grad⁽⁴⁰⁾ and Torres, Bustamante-Ubilla⁽⁴¹⁾ supports this finding, showing that ethnically diverse boards are more likely to adopt fair remuneration practices that align with long term financial performance.

Conversely, for board tenure diversity (BTD), the mediation effect estimate is -175,359 with significant at 1 % level for mediation effect of director remuneration between board tenure diversity and company financial performance.

Sobel-Goodman	Est	Std Err	z	P > z
BGD	0,912	0,707	1,290	0,197
BED	0,768	0,421	1,824	0,068
BTD	-0,677	0,427	-1,583	0,113

The mediation effect of director remuneration between board diversity and environmental social and governance (ESG) performance is less pronounced. The mediation effect shows the estimate is 0,912 which is not significant. This suggests that director remuneration does not significantly mediate the relationship between gender diversity and ESG performance. This finding is consistent with studies indicating that the influence of gender diversity on ESG outcomes may occur through direct governance and decision-making practices rather than through remuneration.⁽⁴¹⁾

The mediation effect of director remuneration between board ethnicity diversity (BED) and ESG performance shows the estimate value is 0,768 with marginally significant ($p=0,068$). This implies that there is potential but not definitive, mediation effect where ethnic diversity might influence ESG performance through director remuneration. Laique, Abdullah⁽⁶⁾ suggest that while ethnically diverse boards may drive better ESG practices, the mediation by director remuneration is not strongly establish.

For board tenure diversity (BTD), the mediation effect shows -0,677 which is not significant. This suggests that tenure diversity does not significantly mediate the relationship between tenure diversity and ESG performance. Studies by Allemand, Borodak⁽⁴⁴⁾ and Kok, van Schalkwyk⁽⁴⁵⁾ indicate that the direct impacts of tenure diversity on ESG may overshadow any indirect effects mediated through director remuneration.

Therefore, the Sobel Goodman test result highlight that director remuneration significantly mediates the

impact of board diversity (gender, ethnicity, tenure) on EVA, while its mediation effect on ESG performance is less clear.

CONCLUSION

This study highlights the critical role of board diversity in enhancing company performance, both financial and non-financial in Malaysia public listed companies. It demonstrates that gender, ethnic and tenure diversity among board members positively impact EVA and ESG performance. Furthermore, director remuneration mediates the relationship between board diversity and financial performance (EVA), emphasizing the need for fair and performance-based compensation structures. These findings provide valuable insights for policy makers, stakeholders, and investors, suggesting that promoting board diversity and equitable remuneration practices can drive better governance and overall company success.

However, the mediation effect of director remuneration on the relationship between board diversity and ESG performance is less clear compared to its impact on EVA. This could be attributed to several factors. ESG performance is influenced by a wide range of governance practices and strategic decisions that may not be directly tied to director remuneration. While gender and ethnic diversity on boards might drive ESG improvements through direct governance practices and strategic decisions, these improvements may not adequately be captured by changes in director remuneration. Additionally, tenure diversity can bring about potential conflicts and inconsistencies due to varying perspectives and priorities among directors with different lengths of service, complicating the implementation of cohesive ESG strategies.

The complex nature of ESG metrics, encompassing environmental, social and governance aspects means that the impact of board diversity on these metrics may be more direct and multifaceted, reducing the relative importance of remuneration as a mediating factor. Diverse comprehensive governance practices, which are not solely dependent on remuneration policies.

In contrast, the mediation effect of director remuneration on the relationship between board diversity and EVA is more pronounced. Director remuneration structures that align with long-term financial performance goals can leverage the diverse perspectives of gender, ethnically and tenure diverse board, enhancing overall governance and financial outcomes. Performance-based compensation for directors to focus on strategies that improve EVA, thereby making remuneration a significant mediator in the diversity-performance relationship. Future research could expand the scope by exploring different contexts and extending the study period to generalize the results. Understanding in depth the influence of board diversity on company financial and non-financial performance, including the mediating effect of director remuneration can contribute towards effective corporate governance practices.

Implication and Limitation

The theoretical implications of this study are addressed in the context of the relationship between board diversity and company performances through the mediating effect of director remuneration. As a result, shown previously, the study impacts our understanding and knowledge related to the effect of board diversity on company performances. In-depth analysis, using bootstrapping technique for mediating analysis is another contribution in terms of methodological context which is going to be useful for future researchers. The study also impacts in terms of managerial implications such as stakeholder and investor. The study is expected to contribute in assisting the policy maker for deciding the policy regarding the board will be more effective when they become diverse. The study also will be useful for investors to review the company financial performance before deciding to invest in a certain company as the study measured company financial performance using economic value added. This will give a clear picture about the company financial health as it calculates also the cost of capital. This study gives advantages for shareholders and investors on how efficient the company utilizes the resources and makes profit. The implication in this study will not be achieved without a limitation faced by the researcher. The study only focuses on Malaysia public listed companies, where future research can expand the period of study and conduct the same study in different contexts of country to generalize the results.

REFERENCES

1. Chaher D, Lakhal L. The impact of TQM on financial and non-financial performance: the mediating role of corporate social responsibility. *The TQM Journal*. 2024.
2. Chang C-H, Lin H-W, Tsai W-H, Wang W-L, Huang C-T. Employee satisfaction, corporate social responsibility and financial performance. *Sustainability*. 2021;13(18):9996.
3. Borges MFR, Azevedo GMdC, Oliveira J. Literature review on gender diversity in top management teams of companies and its relationship with firm performance and audit quality. *International Journal of Disclosure and Governance*. 2024:1-25.

4. Securities Commission Malaysia. PRINCIPLES-BASED SUSTAINABLE AND RESPONSIBLE INVESTMENT TAXONOMY FOR THE MALAYSIAN CAPITAL MARKET. 2022.

5. Tayyab A, Hussain S, Waheed A. Executive remuneration, corporate governance and corporate performance: Evidence from China. *Economic research-Ekonomska istraživanja*. 2021;34(1):3092-118.

6. Laique U, Abdullah F, Rehman IU, Sergi BS. Two decades of research on board gender diversity and financial outcomes: Mapping heterogeneity and future research agenda. *Corporate Social Responsibility and Environmental Management*. 2023;30(5):2121-44.

7. Trinh VQ, Trinh HH, Nguyen THH, Vo XV. Board gender diversity and firm-level climate change exposure: A global perspective. *Finance Research Letters*. 2023;55:103995.

8. Juliana A-MB. Impact of Board Gender Diversity on Social and Environmental Performance of Firms: Evidence from Sub-Sahara Africa: ISCTE-Instituto Universitario de Lisboa (Portugal); 2021.

9. Đặng R, Houanti LH, Simioni M, Sahut J-M. The role of endogeneity in the relationship between board gender diversity and corporate social performance: evidence from a control function method. *Annals of Operations Research*. 2023:1-33.

10. Marcon GA, Alberton A, Ayala DHF. Stakeholder theory and actor-network theory: The stakeholder engagement in energy transitions. *Business Strategy and the Environment*. 2023;32(1):673-85.

11. Arora A. Gender diversity in boardroom and its impact on firm performance. *Journal of Management and Governance*. 2022;26(3):735-55.

12. Vairavan A, Zhang GP. Does a diverse board matter? A mediation analysis of board racial diversity and firm performance. *Corporate Governance: The international journal of business in society*. 2020;20(7):1223-41.

13. Hartmann CC, Carmenate J. Does board diversity influence firms' corporate social responsibility reputation? *Social Responsibility Journal*. 2021;17(8):1299-319.

14. Bagh T, Khan MA, Meyer N, Riaz H. Impact of boardroom diversity on corporate financial performance. *Humanities and Social Sciences Communications*. 2023;10(1):1-13.

15. Brummer C, Strine LE. Duty and diversity. *Vand L Rev*. 2022;75:1.

16. Sun XS, Bhuiyan MBU. Board tenure: A review. *Journal of Corporate Accounting & Finance*. 2020;31(4):178-96.

17. Huang S, Hilary G. Zombie board: Board tenure and firm performance. *Journal of Accounting Research*. 2018;56(4):1285-329.

18. Ilona D. Directors' diversity, ownership concentration, and company performance in Indonesian listed companies. *Universiti Utara Malaysia*. 2015.

19. Putri MU, Suharman H, Handoyo S. The Influences of Slack Resources, Board Gender Diversity on the Quality of Corporate Social Responsibility Disclosure. *Daengku: Journal of Humanities and Social Sciences Innovation*. 2023;3(4):684-95.

20. Dmytriyev SD, Freeman RE, Hörisch J. The relationship between stakeholder theory and corporate social responsibility: Differences, similarities, and implications for social issues in management. *Journal of Management Studies*. 2021;58(6):1441-70.

21. Dakhli A. Does financial performance moderate the relationship between board attributes and corporate social responsibility in French firms? *Journal of Global Responsibility*. 2021;12(4):373-99.

22. Yan J, Khan TM, Zhu N, Khan MA, Hassan H. Does CEO's initial tenure enhance CSR practices? Evaluating the consequences of CEO's initial tenure CSR engagement in China. *Environment, Development and Sustainability*.

2023:1-24.

23. Lintelo N. The effect of gender-diverse boards on firms financial performance: Evidence from France and the United States: University of Twente; 2020.

24. Chen C, Hassan A. Management gender diversity, executives compensation and firm performance. *International Journal of Accounting & Information Management*. 2022;30(1):115-42.

25. Gupta PP, Lam KC, Sami H, Zhou H. Board diversity and its long-term effect on firm financial and non-financial performance. Available at SSRN 2531212. 2015.

26. Dezső CL, Li Y, Ross DG. Female CEOs and the compensation of other top managers. *Journal of Applied Psychology*. 2022;107(12):2306.

27. Dwekat A, Seguí-Mas E, Zaid MA, Tormo-Carbó G. Corporate governance and corporate social responsibility: mapping the most critical drivers in the board academic literature. *Meditari Accountancy Research*. 2022;30(6):1705-39.

28. Abdullah AH, Yusoff S, Islam A, Ahmad HA. Effect of board composition on the corporate performance: The moderating role of corporate governance practices in Iraq. *Psychology and Education Journal*. 2021;58(3):2688-706.

29. Schuchardt M, Kammerlander N. Board diversity in family firms across cultures: a contingency analysis on the effects of gender and tenure diversity on firm performance. *Journal of Family Business Strategy*. 2024;15(2):100554.

30. Akhtar T, Tareq MA, Rashid K. Chief executive officers' monitoring, board effectiveness, managerial ownership, and cash holdings: Evidence from ASEAN. *Review of Managerial Science*. 2021;15:2193-238.

31. Gonzalez M, Arevalo Lizarazo G, Guzmán A, Trujillo M-A. The Value Effect of Sustainability: Evidence From Latin American ESG Bond Market. Available at SSRN 4541665. 2023.

32. Adelopo I, Adu-Ameyaw E, Cheung KY, Bako HS. Managerial compensation and firm performance: The moderating role of managerial ownership and other governance factors. *Journal of Corporate Accounting & Finance*. 2023;34(3):31-46.

33. Graziano C, Rondi L. Product market competition, executive compensation, and CEO family ties. *Review of Industrial Organization*. 2021;58(3):357-97.

34. Eliza E. Sustainable Investment Practices: Assessing the Influence of ESG Factors on Financial Performance. *Global International Journal of Innovative Research*. 2024;2(7):1445-54.

35. Golovko N. Disentangling the Relationship between CSR and Executive Compensation: Evidence of S&P500 companies 2023.

36. Labanauskė K. Re-exploring Seminal Works on Resource-Based View and Resource Dependence Theory: The Case of Entrepreneurial Research Organization. *Organizacijų vadyba: sisteminiai tyrimai*. 2022(87):21-42.

37. Merara M, Janang JT, Bujang I. Gender and Ethnic Diversity, and Economic Value Added: Evidence from Government-Linked Companies. *International Journal of Service Management and Sustainability*. 2021;6(2):113-30.

38. Bufarwa IM, Elamer AA, Ntim CG, AlHares A. Gender diversity, corporate governance and financial risk disclosure in the UK. *International Journal of Law and Management*. 2020;62(6):521-38.

39. Safiullah M, Akhter T, Saona P, Azad MAK. Gender diversity on corporate boards, firm performance, and risk-taking: New evidence from Spain. *Journal of Behavioral and Experimental Finance*. 2022;35:100721.

40. Grad RJ. Applying Best Practices to Optimize Racial and Ethnic Diversity on Nonprofit Boards: An

Improvement Study: University of Southern California; 2020.

41. Torres F, Bustamante-Ubilla M, Campos-Troncoso R. Diversity of the Board of Directors and Financial Performance of the Firms. *Sustainability*. 2021;13(21):11687.

42. Phuong TT, Le A-T, Ouyang P. Board tenure diversity and investment efficiency: A global analysis. *Journal of International Financial Markets, Institutions and Money*. 2022;81:101657.

43. Ali, Wang M, Jebran K, Ali ST. Board diversity and firm efficiency: evidence from China. *Corporate Governance: The International Journal of Business in Society*. 2021;21(4):587-607.

44. Allemand I, Borodak D, Hollandts X. Board Gender Diversity and ESG: The Influence of the Varieties of Capitalism 1. *Finance*. 2023(0):1-47.

45. Kok G, van Schalkwyk CH, Du Toit E. The association between board characteristics and the risk-adjusted return of South African companies. *International Journal of Disclosure and Governance*. 2021;18:58-70.

FINANCING

This paper was created within the project assigned by the Universiti Malaysia Perlis (UniMAP). The project registration number RACER/1/2019/SS01/UNIMAP//1.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

AUTHORSHIP CONTRIBUTION

Conceptualization: Noraida Adila Che Mat and Sri Sarah Maznah Mohd Salleh.

Data curation: Noraida Adila Che Mat.

Formal analysis: Noraida Adila Che Mat.

Research: Noraida Adila Che Mat.

Project Management: Noraida Adila Che Mat and Sri Sarah Maznah Mohd Salleh.

Resources: Noraida Adila Che Mat.

Software: Noraida Adila Che Mat.

Supervision: Sri Sarah Maznah Mohd Salleh.

Validation: Sri Sarah Maznah Mohd Salleh.

Display: Noraida Adila Che Mat.

Drafting: Noraida Adila Che Mat.

Writing: Noraida Adila Che Mat.