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ESG AND FIRM PERFORMANCE: THE MODERATING ROLE OF BOARD DIVERSITY

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Abstract: *ESG likely affects firm performance because better ESG practices improve firm image among investors, stakeholders, and the public. Besides, ESG practices will reduce long-term operating costs and facilitate firms to acquire access to capital from their investors. In this respect, board diversity, especially gender and age, is critical because boards of directors are crucial in implementing ESG practices. Board diversity likely strengthens or weakens the relationship between ESG performance and firm performance. This study seeks to test the impact of ESG on firm performance among Indonesian publicly listed firms in 2014-2022. Studies on ESG in Indonesia, especially using ESG scores, remain limited, thus necessitating further studies. Our sample is Indonesian firms engaging in ESG practices, as indicated by ESG score in 2014-2022, resulting in 305 firm-year observations. We test the hypotheses using multiple linear regression. The results demonstrate that ESG positively affects firm performance. Further, board diversity, especially gender, strengthens the positive impacts of ESG performance on firm performance. Nevertheless, the board of directors' age diversity does not moderate the positive effect of ESG on firm performance, suggesting that better ESG practices will improve firm performance and the impact is stronger when firms have more female directors. The theoretical implication of this study offers a new perspective on how and why firms decide to adopt ESG practices on legitimacy theory context. The practical implication of this study motivates firms to enhance their transparency in their ESG performance reporting to enhance surrounding communities and stakeholders' trust*[1].

Keywords: *Age, Board Diversity, ESG, Firm Performance, Gender*

INTRODUCTION

The Environmental, Social, and Governance (ESG) principles represent a framework system encompassing environmental, social, and governance pillars. ESG practices help firms achieve Sustainable Development Goals (SDGs) that focus on environmental, social, and governance issues. In the environmental aspect, firms can evaluate their waste management systems to not pollute, especially for irreplaceable natural resources by implementing effective risk management systems to protect biodiversity in their surrounding environment. In the social aspect,

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firms will promote better relationships with communities, customers, suppliers, the public, investors, and governments. In the governance aspect, it is expected that each firm component runs operating activities according to sustainability principles, including gender equality in their board of directors to achieve SDGs. Responsible investment principles refer to strategies and practices to accommodate ESG factors in investment decisions. Hence, investors typically refer to ESG in their investment standards and strategies to evaluate firm behavior and performance (Astuti 2023).

Investors currently focus on certain issues like climate change, environment, social, and governance in their investment decisions, motivating firms to compete in realizing ESG issues. There has been increased interest and transparency in ESG implementation in Indonesia. The IBCSD 2021 survey reveals that Indonesia ranked 36th among 47 global capital markets in ESG implementation (Ramadhani 2022). The Indonesian government has continuously promoted ESG implementation among firms in the G20 infrastructure agenda led by the Indonesian Presidency. Additionally, the government establishes an ESG framework through the Ministry of Finance (Rahayu 2023).

Firms' involvement in ESG activities can serve as deliberate and calculated efforts, offering the firms a distinct edge over their competitors. ESG policies possess significant long-term investment potential that will affect both firm stakeholders and shareholders (Almeyda and Darmansya 2019). Numerous firms have attempted to address market demands, as seen by the growing transparency in disclosing corporate ESG-related information. Consistent with this approach, there has been a rise in the attention of the financial market on sustainability matters during the past decade (Li et al. 2018). Firms that effectively implement ESG practices possess a profound comprehension of long-term strategic matters and are more likely to accomplish their long-term objectives. ESG information enables analysts to make estimates that align with firms' realistic targets. Firm managers are also more likely to process more precise information and outperform their target markets (Tarmuji, Maelah, and Tarmuji 2016). According to Tan and Zhu (2022), firms with higher ESG scores exhibit better image and performance.

Firms will effectively implement ESG when supported by high-quality human resources, including their board of directors. Investors currently tend to emphasize ethical business behavior when making investment decisions. For instance, firms must incorporate fair employee treatment and human rights in achieving their commercial goals (Auer and Schuhmacher 2016). These factors may be reflected by boards of directors which are in charge of corporate governance, especially in proposing and making decisions on sustainability-related business strategies. The composition of boards of directors arguably varies, including gender and age composition. Adams et al. (2015) argue that a more diverse board composition will increase firms' financial performance and the effectiveness of firm monitoring.

Prior studies on the relationship between board diversity remain limited with different and even conflicting (Rao and Tilt 2016; Rudyanto et al. 2024). Post and Bryon (2015) document that boards of directors have distinct effects (negative and positive) due to other determining factors. Sari and Widiatmoko (2023) demonstrate a positive association between the proportion of female directors and firm performance. Prior studies also indicate that gender board diversity is associated with more stringent monitoring (Larcker and Tayan 2016), improved firm performance (Kim and Starks 2016), better earnings quality (Srinidhi, Gul, and Tsui 2011), and decrease investment efficiency (Dwistia and Hadyana 2023). Prior study on board age diversity indicate that board age positively affects dividend policy (Taufik, Jessica, and Destriana 2022). Nevertheless, studies on the contribution of female and old/young directors to ESG remain limited in Indonesia context. Research on board diversity is mostly conducted in developed countries. Research in Indonesia is limited and requires further study. Indonesia is a unique setting because ESG disclosure in Indonesia is just starting to develop. Indonesian capital market has witnessed a new trend where investors put more emphasis on environmental, social, and governance. Firm's ESG scores rating by Refinitiv, is increasing from year to year. Research on ESG performance in Indonesia evolve on the consequences of ESG and also variables that strengthen the relationship between ESG and firms value, including board diversity. The diversity of boards in Indonesia is also interesting due to limited women on boards.

Research on ESG and firm performance has been conducted by Almeyda and Darmansya (2019), Buallay (2019), Nisa, Titisari, and Masitoh (2023), Nugroho and Hersugondo (2022), and Safriani and Utomo (2020). Research on the effect of board diversity on ESG has also been conducted by Farida (2019), Dong, Liang, and Wanyin (2023), Ismail and Latiff (2019), Ibrahim and Hanefah (2016), and Manita et al. (2018). Previous research has not considered the board diversity can strengthen the relationship between ESG and firm performance. This study seeks the association between ESG performance and firm performance with board diversity as the moderating variable. Board diversity as a moderating variable since board diversity is expected to strengthen the influence of ESG on firm performance. The relationship between ESG and firm performance will be stronger with a female board that has a higher emotional concern for social, economic and environmental issues. Meanwhile, board age diversity will strengthen the influence of ESG on firm performance because older board members are better able to appreciate ESG issues and see the implications in the long term. Older boards tend to ensure that ESG strategies are well integrated into operations and management. We argue that positioning board diversity as a moderating variable will offer a more nuanced understanding of factors that promote ESG practices. This will help us understand firms' internal factors that may strengthen the association between ESG and firm performance and will affect firms' responses to and implementation of ESG practices in the context of better corporate governance. Besides boards' gender diversity, their age diversity is also worth noting. Directors' age is a proxy of their business experience because younger directors are arguably more knowledgeable on novel and innovative issues and possess better skills to process these novel ideas, especially ESG-related ones (Ibrahim and Hanefah 2016).

This study seeks to test the association between ESG performance and firm performance with board diversity as the moderating variable. We use Refinitiv Eikon's ESG score to measure ESG performance. ESG score reporting remains limited and ESG-related studies still focus on advanced countries with different ESG performance indicators (Landhiani 2023). At the same time, the Indonesian capital market has witnessed a new trend where investors put more emphasis on environmental, social, and governance factors using ESG scores. ESG scores are interesting parameters due to their high validity. More specifically, they possess a clearer scoring basis and more holistic methodology and utilize broader and more transparent data. This study fills in the literature gap by analyzing the impact of ESG on firm performance by using ESG scores to examine firms' ESG performance. We also test the role of board diversity in moderating the association.

Our study offers empirical evidence of ESG and board diversity literature in Indonesian. Hence, this study informs academicians by highlighting the positive effect of ESG performance on firm performance. Better ESG practices improve firm performance, and the impact is stronger when firms have more female directors. Further, ours also advise stakeholder in understanding ESG performance and board diversity and making decisions accordingly. This study also informs the manager that ESG performance and the presence of female directors improve firm performance.

Legitimation Theory

Legitimation theory emphasizes that firms must appreciate entire activities related to existing social values and norms applied in their surrounding communities to acquire legitimation from the public or investors. Firms must ensure that their activities are acceptable and considered legal by external stakeholders (Deegan and Unerman 2006). It is undeniable that firms' values are distinct from publicly held ones. These differences are typically labeled as legitimacy gaps that may affect firms' ability to continue their activities. Hence, firms must evaluate social values and adjust their values with these values to alter public perception of them as a legitimacy tactic (Chairiri 2008).

One way to mitigate legitimacy gaps is disclosing their responsibilities for environmental, social, and governance (ESG) practices. According to Chairiri (2008), organizations are integral parts of social systems that aim to align themselves with social values and norms in societies. ESG practices enable firms to acquire public recognition on the alignment of firm values and norms with public ones that will enhance firms' sustainability.

In the context of board of director diversity, especially gender and age, legitimacy theory offers a better understanding of the dynamics. Gender and age diversity in boards of directors becomes increasingly important because it reflects inclusiveness, fair representation, the adoption of publicly accepted values, and more stringent regulation related to good corporate governance. Firms with more diverse boards of directors improve their legitimacy upon their stakeholders, including investors, employees, consumers, and the general public.

Environmental, Social, Governance (ESG)

Environmental, social, and governance refer to information encompassing firms' environmental, social, and governance disclosure in their annual reports as a form of sustainability (Henisz and McGlinch 2019). ESG information in annual reports motivates shareholders to share the information with potential investors and increase share prices. Hence, firms' profitability is not only affected by financial information but also those related to firms' (Moratis 2018). ESG frameworks consist of environment (resource use, emissions, innovation), social (workforce, human rights, community, product responsibility), and governance (management, shareholders, and corporate social responsibility or CSR strategy) (Refinitiv Eikon 2022).

Firm Performance

Firm performance refers to firms' conditions that reflect their performance and serve as a benchmark of their success. Besides, according to Fairuzaini and Azib (2019), firm performance is associated with the efficiency and effectiveness of capital utilization in firms' operating activities. Firm performance can be affected by various factors like financial or operating performance. Financial statements are the main information source to measure financial performance. One of the numerous firm performance indicators is Tobin's Q. Tobin's Q is a ratio that reflects a firm's value as a performance measure that is determined by comparing the market values of a firm's tangible assets with their replacement cost, or the entire market values (Hayes 2021). Other internal factors that may affect firm performance are effective management, skillful human resources, motivation, and satisfaction. Besides, external factors like market conditions and regulatory changes may affect firm performance. The appropriate use of technology is also a key factor in improving firm performance to achieve their objectives.

Board Diversity

Board diversity refers to diversity in the composition of firms' boards of directors (Yogiswari and Badera 2019). Diversity includes various aspects, like gender, ethnic background, regional representativeness, and skills or experience. Board diversity is crucial in corporate governance due to its ability to offer diverse perspectives, improve decision quality, and create inclusive environments. Gender diversity is a part of board diversity that refers to a comparison between the number of female board members and the entire board members (Farida 2019).

Boards of directors set short-run and long-run targets and strategies. Firms with more diverse boards acquire more information in their decision-making processes that will arguably maximize their performance (Apriliuni et al. 2021). Firms' gender diversity will positively affect firm performance through the involvement of various perspectives and life experiences owned by female and male board members that will enrich the decision-making processes. Gender diversity creates environments where diverse perspectives can be easily proposed and discussed.

Hypothesis Development

Environmental, Social, Governance (ESG) and Firm Performance

The implementation of ESG (Environmental, Social, and Governance) practices in the legitimacy theory perspective indicates organizational commitments to sustainability and social responsibilities. By focusing on environmental, social, and governance aspects, ESG practices help organizations respond to social expectations and norms developed in their surrounding environments. Firms develop their legitimacy by acknowledging critical issues, maintaining balances between economic interests and social-environmental impacts, and openly engaging in stakeholders' activities. Hence, ESG arguably facilitates social investments for their stakeholders' interests that will eventually contribute to performance improvement. Firms' sustainability practices will increase demands and firms' size and attract more stakeholders (Buallay 2019).

The implementation of sustainability practices like ESG positively affects firm performance. ESG scores arguably inform ESG performance as a reflection of firms' responsibilities to their shareholders. ESG practices affect firm performance by improving firm performance as indicated by greater revenue growth, higher profits, and better returns on investments. More particularly, ESG increases investors' capital investments. Thus, firms can utilize greater capital investments to improve production outputs and increase sales and profitability (Safriani and Utomo 2020).

Firms focusing on ESG exhibit better risk management because they try to identify and manage risks better. ESG practices can improve firms' reputation among the general public, stakeholders, and governments, which will eventually lead to broader business support. Firms with higher ESG practices will exhibit better performance. This argument is supported by Tarmuji, Maelah, and Tarmuji (2016) who demonstrate that ESG-responsible investments improve financial performance with a strong and significantly positive correlation between these two variables. Firms with higher ESG scores exhibit better performance. Shakil et al. (2019) also support that ESG positively affects firm performance.

H_1: ESG positively affects firm performance.

Boards of Directors' Gender Diversity Moderates the Effect of ESG on Firm Performance

ESG practices likely have a positive impact on firm performance because they enable firms to minimize risks, improve relationships with various stakeholders, and establish a robust foundation to improve firm growth. A factor that strengthens the association between ESG and firm performance is boards of directors' gender diversity. Diversity within firms is believed to potentially contribute to decision-making processes through better supervision of and adjustment to shareholders' interests. More specifically, according to Eagly and Carli (2003) and Rudyanto and Handojo (2013), men tend to possess greater masculinity with more dominant, brave, and emotional sides while women tend to exhibit more communal perspectives like being supportive, empathy, and tenderness. Accordingly, female board members improve ESG practices (Larcker and Tayan 2016). Loukil, Yousfi, and Yerbanga (2019) argue that the market reacts positively to the presence of female board members because women have greater emotional concerns about social, economic, and environmental problems. Women show greater empathy for various social problems like poverty, violence, and bullying in their surrounding environments and they can find solutions for these problems. They also arguably have greater environmental concerns to minimize environmental pollution due to their firms' waste through effective waste management and reforestation.

Female board members also possess better thinking ability to be risk averse, innovative, participative, process-oriented, and understanding of various firm segments than their male counterparts who tend to be more logical, risk-taking, challenge-loving, and output-oriented (Eliya and Suprapto 2022). Hence, women are more caring for others' welfare. Female directors' psychological characters, backgrounds, and experience motivate them to be involved more in strategic issues affecting their firms' ESG and stakeholders' interests. The argument is supported by Fathonah (2018) and Santoso and Wahyudi (2021) who argue that gender diversity strengthens the association between ESG and firm performance. The presence of women on boards of directors who have greater concerns about ESG strengthens the relationship between ESG and firm performance.

Female directors are more responsive to stakeholders' interests and the surrounding public. Their feminine touch exhibits greater social responsibility and a better ability to align public and firm interests. Increased ESG reporting transparency and compliance with regulations are also key advantages of female directors. Female directors' superiority will arguably strengthen the relationship between ESG and firm performance.

H_2: Female board of director members strengthen the positive effects of ESG on firm performance.

Boards of Directors' Age Diversity Moderates the Effect of ESG on Firm Performance

ESG practices positively affect firm performance, especially related to the age diversity of boards of directors. Age is arguably an asset for board members because it reflects experience in making decisions (Ibrahim and Hanefah 2016). According to Rao and Tilt (2016), age is typically associated with concerns or knowledge of environmental issues where older generations are more conservative on this issue while younger board members are more dynamic, smarter, open to technological changes, and active in promoting business success. Nevertheless, older board members are considered to have more experience and networks that are critical in maintaining environmental, social, and governance stability (Katmon et al. 2017).

There are several arguments supporting the idea that older board members strengthen the effect of ESG on firm performance. Older board members have better abilities to deal with business challenges. They are more able to appreciate ESG issues with their maturity and evaluate the long-term implications of these issues. They are more likely to ensure that ESG strategies are better integrated into firms' operations and management. Besides, older board members evaluate better, enabling firms to avoid risks due to decisions made (Giannarakis 2014). This argument is supported by Bear, Rahman, and Post (2010) who find that firms with the highest sustainability ranks have board members with an average age of 56 years. Older board members have a better understanding, experience, and critical thinking of ESG-related risks. Older board members' superiority will strengthen the effect of ESG on firm performance because better implementation of ESG pillars will improve firm performance.

H_3: Older boards of directors strengthen the positive effect of ESG on firm performance.

METHOD

Sample

This study employs the purposive sampling method by selecting Indonesian publicly listed firms based on the following criteria: (1) having ESG scores on the Refinitiv Eikon database, (2) publishing information about boards of directors on their annual reports, (3) publishing financial statements in Rupiah. Table 1 presents the results of the sample selection.

Operational Definition

Table 2 displays the operational definition of our research variables. Firm performance refers to the one achieved in the same year as the publication year of ESG scores because firms engage in ESG activities continuously for the whole year. In other words, we do not utilize a lagged indicator in measuring the firm performance variable because the Refinitiv Eikon database produces ESG scores by not only relying on annual reports or Corporate Social Responsibility (CSR) reports but also other sources like firms' websites and non-governmental organizations (NGO) websites, stock exchange reports, and mass media (Refinitiv Eikon 2022). This study determines the age of board members above 50. At the age of 50 the board is considered to be a senior board member. The senior board member brings experience and wisdom, and also have a strong network and influence on the firm (Lubis, Syahyunan, and Azhmy 2022)

Hypothesis Testing

We test our research hypotheses by using the following multiple regression equations:

Equation 1

$KP = a + \beta_1 ESG + \beta_2 Size + \beta_3 Lev + e$ (1)

Equation 2

$KP = a + \beta_1 ESG + \beta_2 Gender + \beta_3 (ESG*Gender) + \beta_4 Size + \beta_5 Lev + e$ (2)

Equation 3

$KP = a + \beta_1 ESG + \beta_2 Age + \beta_3 (ESG*Age) + \beta_4 Size + \beta_5 Lev + e$ (3)

where:

KP	= Firm Performance
ESG	= ESG
Gender	= Gender Diversity
Age	= Age Diversity
Size	= Firm Size
Lev	= Leverage

RESULT

Descriptive Statistics

Table 3 presents the descriptive statistics of the research variables. Table 3 demonstrates the descriptive statistics of firm performance, ESG, gender, age, leverage, and firm size. Overall, the mean values of firm performance and ESG are 2.117 and 47.4 (from a 0-100 range), suggesting that Indonesian firms have not optimally engaged in ESG activities. The mean value of gender diversity is 0.15 (much lower than 0.5), implying that men still dominate Indonesian firms' director positions. Lastly, the mean value of age diversity is 0.64.

Table 1. Sample Selection Results

No	Criteria	Number of observations (firm-year)
1	Indonesian publicly listed firms, 2014-2022	8,082
2	Not having ESG scores on the Refinitiv Eikon database	(7,281)
3	Not publishing information about directors on annual reports.	(427)
4	Not using the Rupiah as reporting currency	(69)
Number of Observations		305

Before testing our hypotheses, we initially run the normality, multicollinearity, autocorrelation, and heteroskedasticity tests. The results of the normality tests indicate that the data is not normally distributed. We follow the Central Limit Theorem (CLT) that argues that it is safe to assume that the sample distribution approaches normal distribution when the data is sufficiently large (Kwak and Kim 2017). Our observation is 305 (>30), hence the normality assumption holds. Further, the multicollinearity and autocorrelation tests indicate that the data pass the tests. Lastly, the data does not pass the heteroskedasticity test (p value =0.000) or exhibit a heteroskedasticity tendency. We then utilize the robust standard method that offers more accurate estimations of the variance of the regression parameters, especially when the data exhibit different variances or extreme values (Mansournia et al. 2021). Robust Standard Error ensures that our results remain valid despite the heteroskedasticity problems.

Table 2. Operational Definition of Research Variables

Variable	Measurement
ESG	Environmental, Social, and Governance pillars are scored with a percentage range of 0-100 according to the Refinitiv Eikon database (Setiarini et al. 2023)
Firm Performance	$\text{Tobin's Q}=\frac{\text{Firm's Total Market Value}}{\text{Firm's Book Value}}$ where: NP = the amount of outstanding shares x price per share NB = Total Assets – Total Liabilities
Gender	$\text{Gender}=\frac{\text{The number of female directors}}{\text{Total number of directors}}\times 100\%$
Age	$\text{Age}=\frac{\text{The number of directors}>50\text{ years old}}{\text{Total number of directors}}\times 100\%$
Firm size	Firm Size = Ln (Total Assets)
Leverage	$\text{Leverage}=\frac{\text{Total Liabilities}}{\text{Total Equity}}$

Table 3. Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
KP	305	2.117	3.608	0.001	37.662
ESG	305	47.4	19.168	1.201	88.092
Gender	305	0.159	0.175	0	0.667
Age	305	0.641	0.264	0	1
Lev	305	2.355	2.812	0.115	20.43
Size	305	31.58	1.776	26.687	38.553

The test for the first hypothesis indicates a significantly positive value of ESG, hence the first hypothesis predicting that ESG positively affects firm performance is supported. For the second hypothesis, the results indicate a significantly positive value of the ESG*Gender interaction variable, suggesting that the second hypothesis predicting that female directors strengthen the positive impact of ESG on firm performance is supported. Lastly, for the third hypothesis, the results suggest an insignificant regression coefficient for the ESG*Age interaction variable. Hence, the third hypothesis predicting that older directors strengthen the positive impact of ESG on firm performance is not empirically supported. For the three hypotheses, leverage as the control variable does not affect firm performance while firm size negatively affects firm performance.

Table 4. The Results of the Hypothesis Testing

	H1	H2	H3
KP	Coef. (St. Err.)	Coef. (St. Err.)	Coef. (St. Err.)
ESG	0.027***	0.002	0.045**
	(0.01)	0.012	0.021
Gender		-6.861***	
		1.856	
ESG*Gender		0.143***	
		0.048	
Age			2.146
			1.86
ESG*Age			-0.03
			0.032
Lev	0.046	0.014	0.066
	0.089	0.091	0.094
Size	-0.71***	-0.685***	-0.702***
	0.203	0.204	0.202
Constant	23.133***	23.613***	21.54***
	6.229	6.232	5.644
R-squared	0.099	0.117	0.103
F-test	4.320	6.636	5.080
Prob > F	0.005	0.000	0.000

*** p<.01, ** p<.05, * p<.1

Environmental, Social, Governance (ESG) and Firm Performance

Our results demonstrate that ESG positively affects firm performance. Firms with higher ESG scores perform better as indicated by their Tobin's Q values. The environmental, social, and governance aspects enable firms to respond to the social expectations and norms of the public, stakeholders, and investors. The implementation of ESG practices positively affects firms because such initiatives serve as a benchmark of firms' performance and responsibilities to their surrounding communities and shareholders.

Firms that have implemented ESG possess market values higher than their book values, which will attract investors to invest in socially and environmentally responsible firms. Similarly, firms that put greater emphasis on ESG pillars will improve their reputations because these practices are socially and environmentally beneficial. Alqasa and Afaneh (2022) establish that better reputations enhance customer trust and loyalty. Firms that implement ESG will also improve their risk management because these firms have anticipated their risks. ESG also enables firms to assess social risks. The legitimacy theory argues that the provision of nonfinancial information is a way to obtain legitimacy from surrounding environments (Nisa, Titisari, and Masitoh 2023). In the ESG context, firms that perform better in environmental, social, and governance aspects tend to be more socially acceptable because they meet social expectations and values. Firms with higher ESG scores can increase authority in their industries and acquire additional legitimacy as responsible and sustainable entities. Firms are responsible for responding to the demands to improve their ESG performance and manage environmental and social issues effectively to enhance or maintain their legitimacy among stakeholders (Al Farooque et al. 2022). Hence, they can improve their operating activities and eventually generate higher returns on their assets. The results support Velte (2019), Buallay (2019), Nugroho and Hersugondo (2022), who document that ESG positively affects firm performance. Firms with higher ESG scores perform better as indicated by higher Tobin's Q score.

Boards of Directors' Gender Diversity Moderates the Effect of ESG on Firm Performance

Our results show that the presence of female directors strengthens the positive impact of ESG on firm performance. Female directors have greater concerns about ESG issues. Effective ESG implementation will enhance ESG scores that will eventually improve firm performance. Female directors frequently offer unique perspectives on environmental, social, and governance issues that may be underrepresented by male directors. They can also create more interactive dialogue and better decision-making processes in ESG-related issues (Kyaw, Olugbode, and Petracci 2017). Women frequently enrich decision-making processes with their better communication skills and unique problem-solving styles. Female directors also strengthen the emphasis on socially and environmentally responsible business practices. This will motivate boards of directors to maintain sustainable and responsible business practices to enhance their legitimacy among stakeholders.

More diverse boards of directors improve firms' capabilities to acquire critical resources to preserve stakeholders' interests (Al-Hiyari et al. 2023). More specifically, gender-inclusive boards of directors reflect diverse experiences, skills, backgrounds, and perspectives (Al Farooque et al. 2022). Our findings are consistent with Manita et al. (2018) and Dong, Liang, and Wanyin (2023) who reveal that the presence of female directors strengthens the impact of ESG on firm performance.

Boards of Directors' Age Diversity Moderates the Effect of ESG on Firm Performance

The results document that boards of directors' age diversity cannot moderate the positive impact of ESG on firm performance. Older directors do not necessarily exhibit greater concerns about ESG practices. Numerous other factors affect firm performance like competence, leadership skills, and commitment to socially and environmentally responsible business practices. These factors may have greater impacts on how directors respond to ESG issues (Ismail and Latiff 2019). A noteworthy issue is that older directors are less responsive to quickly adjusting current conditions, especially in more ESG-related business practices. This will erode boards of directors' ability to quickly respond to changes in surrounding environments and stakeholders' interests.

Decision-making processes require various perspectives from directors. However, age diversity is insufficient to enrich discussion or offer distinct perspectives on ESG issues (Menicucci and Paolucci 2022). This limitation will affect the financial and nonfinancial decision-making processes that will eventually affect firm performance. Lack of ESG implementation practices will lead to lower ESG scores that will erode firm performance, public trust, and investors' attention. The findings are consistent with Ferrero, Banerjee, and García-Sánchez (2016) and Kyaw, Olugbode, and Petracci (2017) who observe that directors' age does not affect ESG practices and firm performance.

CONCLUSION

This study investigates whether ESG practices in Indonesia as reflected by ESG scores affect firm performance as moderated by board diversity. Our empirical tests conclude that Indonesian firms' ESG practices positively affect firm performance. Firms with higher ESG scores exhibit better performance as indicated by greater market values. These firms are more publicly reputable that motivates firms to invest in firms that are more responsible in environmental, social, and governance aspects.

This study also analyzes the role of board diversity in moderating the association between ESG and firm performance. Female directors strengthen the positive impact of ESG on firm performance. They also possess wider perspectives, more sustainability-conscious leadership, and better managerial skills that will strengthen the effect of ESG practices on firm performance. Meanwhile, older directors (more than 50 years old) cannot moderate the positive impact of ESG on firm performance because each individual exhibits unique combinations of experiences, skills, leadership, and adaptability so older age does not necessarily strengthen the impact of ESG on firm performance.

The theoretical implication of this study focuses on the legitimacy theory in the context of ESG implementation in Indonesia. Ours offers a new perspective on how and why firms decide to adopt ESG practices. This theory argues that organizations tend to adopt publicly acceptable practices as a means to improve legitimacy. Meanwhile, the practical implication of this study motivates firms to enhance their transparency in their ESG performance reporting to enhance surrounding communities and stakeholders' trust. Our results also inform scholars to investigate ESG issues. Besides, the awareness of low ESG implementation in Indonesia encourages stakeholders to disseminate knowledge of the importance of ESG in Indonesian business practices and how to effectively implement ESG.

This study is subject to several caveats, including the fact that Indonesian firms possess lower ESG scores, as suggested by the Refinitiv Eikon database which presents that only 10% of total Indonesian publicly listed firms. We advise future studies to use other ESG measures like Bloomberg or ESG disclosure in firms' annual or sustainability reports.

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