



THE INFLUENCE OF ESG ON CORPORATE PERFORMANCE: THE ROLE OF GENDER DIVERSITY OF THE BOARD OF COMMISSIONERS AS A MODERATING VARIABLE

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ABSTRACT

This study aims to examine the influence of Environmental, Social, and Governance (ESG) on company performance and the moderating role of board gender diversity in consumer cyclical and non-cyclical companies listed on the Indonesia Stock Exchange for the 2020–2023 period. This study uses a quantitative approach using panel data regression analysis and Moderated Regression Analysis (MRA). The study sample consisted of 102 companies with a total of 408 observations. Company performance variables were proxied using Return on Assets (ROA) and Return on Equity (ROE). The results indicate that ESG has no significant effect on ROA or ROE. However, board gender diversity has been shown to moderate the relationship between ESG and ROA. These findings suggest that the effectiveness of ESG practices in improving company performance is significantly influenced by the quality of corporate governance, particularly diversity in the board structure.

Keywords: ESG; Company Performance; Board Gender Diversity; ROA; ROE

INTRODUCTION

The manufacturing sector, particularly the consumer cyclicals and consumer non-cyclicals subsectors, plays a strategic role in Indonesia's economic structure, contributing 18.67% to the Gross Domestic Product (GDP) in 2023 (BPS, 2025). Given that nearly 90% of this subsector's output is generated by medium and large-scale industries, its performance serves as a key determinant of macroeconomic stability and investor sentiment in the capital markets (Rahayu et al., 2025). The differing characteristics between non essential goods sensitive to economic cycles in the cyclicals subsector and defensive essential goods in the non-cyclicals subsector create unique risk dynamics and performance patterns within the manufacturing sector (Ida et al., 2025; Jovietha et al., 2024). In an effort to achieve the effectiveness of long-term business strategies, companies are now not only focusing on financial results but are also beginning to integrate the Environmental, Social, and Governance (ESG) framework as a tool for risk management and strengthening relationships with stakeholders (Romano et al., 2020).

The urgency of implementing ESG is driven by the fact that the industrial and manufacturing sectors account for approximately 24% of total global CO₂ emissions, implying a high ecological footprint for companies (IPCC, 2022). However, on-the-ground evidence indicates that ESG adoption in Indonesia still faces significant challenges. (Financial Services Authority, 2023) notes that companies' readiness levels remain low and sustainability reporting has not been uniformly standardized. Most manufacturing companies are still stuck in compliance-based reporting rather than strategic-based reporting, so ESG disclosures have not yet been able to drive significant improvements in Return on Assets (ROA) and Return on Equity (ROE). Based on stakeholder theory, companies should use ESG as a strategic

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mechanism to create long-term value by meeting stakeholder expectations (Freeman et al., 2019). However, variations in disclosure quality and internal barriers such as competency limitations have prevented the optimal integration of sustainability principles into operations (Alodat, 2024).

Amid uncertainty regarding the impact of ESG on performance, the role of the board of commissioners becomes crucial as the body responsible for overseeing strategic policies. The Upper Echelons Theory explains that board characteristics reflect the values and beliefs that influence the direction of a company's sustainability policies (Hambrick & Mason, 1984). Current trends highlight that board gender diversity is not merely a representation issue but a strategic element that strengthens governance through more transparent and long-term oriented decision-making (Gavana et al., 2025; Heldgaard, 2024). The presence of women on the board is believed to balance the interests of various stakeholders, which in turn can strengthen the link between ESG practices and a company's financial performance (Romano et al., 2020)

Although numerous studies have examined the relationship between ESG and corporate performance, a research gap persists due to inconsistent empirical findings. Some studies have found a positive impact of ESG on profitability, while others have shown inconsistent relationships depending on industry context and the effectiveness of corporate governance. This study is an original research article that offers novelty through the development of an empirical model that positions board gender diversity as a moderating variable in the relationship between ESG and corporate financial performance in the manufacturing sector in Indonesia. The focus on the manufacturing sector is particularly justified given the sector's complex resource usage and higher environmental risks compared to other sectors (UNEP, 2020)

This study aims to empirically test the influence of ESG on corporate performance, proxied by ROA and ROE, and to analyze the role of board gender diversity in moderating this relationship. To ensure the accuracy of the estimates, this study also controls for firm size, leverage, firm age, and liquidity variables that fundamentally have the potential to influence performance stability (Adnindya & Restuti, 2024). Through this in-depth analysis, it is hoped that the study can provide a theoretical contribution to the corporate governance literature in emerging markets and offer practical insights for regulators and investors in formulating sustainable and inclusive governance-based investment policies in Indonesia.

Research on the relationship between ESG and corporate performance still shows inconsistent results. Some studies have found that ESG has a positive impact on corporate profitability, while others show no significant effect (Almulhim et al., 2025; Popescu et al., 2023). Furthermore, most previous studies were conducted in the non-manufacturing sector, so there remains limited empirical evidence explaining this relationship within the manufacturing sector in Indonesia (Fujianti et al., 2024). Therefore, this study includes gender diversity on the board of commissioners as a moderating variable to explain how governance mechanisms can strengthen the effectiveness of ESG implementation in improving corporate performance. As shown in the study by Popescu et al. (2023), companies with good ESG practices tend to have higher profitability levels because they are able to manage environmental and social risks more effectively. However, other studies have found that the impact of ESG on corporate performance is not always significant and is highly dependent on the quality of corporate governance as well as the characteristics of the board of commissioners (Almulhim et al., 2025; Gavana et al., 2025).

LITERATURE REVIEW

This study integrates Stakeholder Theory and Upper Echelons Theory as a conceptual foundation to explain the relationship between Environmental, Social, and Governance (ESG) disclosure, board diversity, and corporate performance. Stakeholder theory, developed by Freeman, emphasizes that a

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company's success depends on its ability to manage relationships with various stakeholders, going beyond mere shareholder value maximization (Donaldson & Preston, 2017; Freeman et al., 2019). From this perspective, companies have a responsibility to internalize the impacts of social and environmental externalities into managerial decision-making processes to maintain legitimacy and create long-term value. The implementation of ESG is viewed as a strategic instrument to meet stakeholder expectations, which in turn can enhance investor confidence and operational efficiency (Clarkson, 1995; Romano et al., 2020).

The implementation of these sustainability strategies is inextricably linked to the role of top level decision-makers. The Upper Echelons Theory posits that strategic decisions and organizational outcomes reflect the values, experiences, and background characteristics of top management and the board of commissioners (Hambrick & Mason, 1984). In this context, board gender diversity becomes a crucial element that enriches strategic thinking. The presence of women on the board not only increases the diversity of perspectives but also promotes corporate transparency and accountability (Dworkin & Schipani, 2018; Menicucci & Paolucci, 2022). Furthermore, women tend to exhibit a higher degree of caution in decision-making and are more sensitive to social and environmental issues (Nurjannah & Oktaryani, 2025). Other studies also indicate that gender diversity on the board contributes to improving the quality of oversight and the effectiveness of corporate policy implementation, including sustainability policies (Ayem & Bobat, 2025; Tanputra et al., 2023). Thus, gender diversity serves not only as a symbol of representation but also as a strategic mechanism for strengthening corporate governance (Gavana et al., 2025; Heldgaard, 2024). The synergy between stakeholders' demands for ESG transparency and the oversight effectiveness of a gender-diverse board is expected to lead to improved financial performance, which in this study is proxied by Return on Assets (ROA) and Return on Equity (ROE) (Romano et al., 2020).

The relationship between ESG and corporate performance is based on the idea that compliance with environmental, social, and governance aspects can strengthen competitive advantage and improve a company's operational efficiency (Amrullah et al., 2025; Anggraini et al., 2023). In the consumer cyclicals and consumer non-cyclicals sectors, strong ESG practices can reduce potential waste costs and operational risks while enhancing competitiveness in the eyes of consumers (Popescu et al., 2023). In the context of emerging markets such as Indonesia, ESG implementation is often still merely administrative in nature and thus has not yet had a significant impact on corporate profitability (Rahmadini & Hartanti, 2025; Sari & Fitriani, 2023). Empirical evidence from Popescu et al. (2023) indicates a positive impact of ESG on the profitability of manufacturing firms. However, inconsistent findings reported by Almulhim et al. (2025), which found that ESG has no significant effect on firm performance, indicate that the relationship between ESG and firm performance remains inconclusive and may depend on certain organizational factors. Furthermore, research by Adnindya & Restuti (2024) indicates that gender diversity acts as a governance mechanism that strengthens the relationship between ESG and firm performance. Based on this rationale, the first hypothesis is formulated:

H1a: ESG has a positive effect on corporate performance (ROA).

H1b: ESG has a positive effect on firm performance (ROE).

Furthermore, gender diversity on the board of commissioners acts as a governance mechanism that moderates the effectiveness of ESG. Different cognitive characteristics within an inclusive board promote a long-term decision-making orientation and greater transparency (Gavana et al., 2025). The

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presence of women on the board strengthens supervisory functions, ensuring that ESG practices are implemented more consistently and credibly, which ultimately mitigates non-financial risks and enhances the company's reputation in the eyes of the market (Almulhim et al., 2025). With stricter oversight, ESG integration is expected to have a stronger impact on asset efficiency and return on capital. Based on this line of reasoning, the second hypothesis is formulated:

H2a: Board diversity moderates the relationship between ESG and firm performance (ROA).

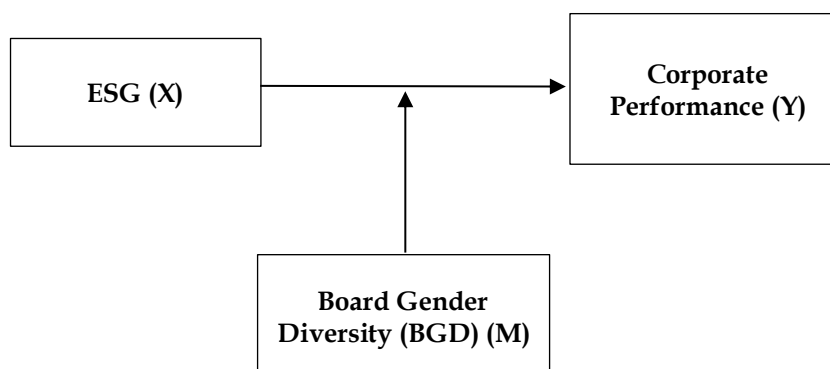
H2b: Board diversity moderates the relationship between ESG and firm performance (ROE).

To ensure the accuracy of the estimates of the main variables, this study uses control variables that include firm size to account for the scale of resources and disclosure pressures, leverage to account for financing structure risk, firm age to capture the maturity level of the governance system, and liquidity to account for short-term financial flexibility (Adnindya & Restuti, 2024; Alodat, 2024; Heldgaard, 2024). Controlling for these fundamental variables is necessary so that the research model can estimate the substantive effects of sustainability and governance practices more accurately.

Conceptual framework

Figure 1 presents the research model examined in this study.

Figure 1. Conceptual framework



RESEARCH METHOD

This study employs an explanatory quantitative design to test the causal relationship between Environmental, Social, and Governance (ESG) disclosures and firm performance, with board gender diversity as a moderating variable. The study population comprises all companies listed on the Indonesia Stock Exchange (IDX) from 2020 to 2023. Sampling was conducted using purposive sampling in the consumer cyclicals and consumer non-cyclicals subsectors based on the following criteria: (1) listed continuously throughout the observation period; (2) published complete annual reports and sustainability reports; and (3) presented reports in Indonesian Rupiah. Based on these criteria, a sample of 102 companies was obtained, comprising a total of 408 observation units over the four-year observation period. The research data consists of secondary data sourced from annual reports, sustainability reports, and the Refinitiv ESG (Petra Data) database. The measurement of variables in this study is presented in Table 1.

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Table 1 of Research Variables

Variable Type	Variable	Measurement
Dependent	Corporate Performance	ROE = Net Profit After Tax / Equity
Independent	ESG Disclosure	ROA = Net Profit / Total Assets
Moderation	<i>Board Gender Diversity</i>	ESG Score (Bloomberg ESG Score Database)
	Firm Size	Percentage of Women on the Board of Commissioners:
Control	<i>Leverage</i>	(Number of Female Commissioners / Total Board) x 100%
	Firm Age	Total Assets
	Liquidity	Debt to Asset Ratio (DAR): Total Liabilities / Total Assets

Data analysis was conducted using panel data regression with STATA software. The analysis began with descriptive statistical tests and the selection of the best regression model through the Chow test, Hausman test, and Lagrange Multiplier test to determine between the Common Effect Model (CEM), Fixed Effect Model (FEM), or Random Effect Model (REM). Tests of classical assumptions, including tests for multicollinearity, heteroscedasticity, and autocorrelation, were conducted to ensure the quality of the regression model (Best Linear Unbiased Estimator). This study applied the `vce(cluster id)` procedure to correct for potential issues of autocorrelation and heteroscedasticity in the panel data. Hypothesis testing was conducted using the Moderated Regression Analysis (MRA) approach to detect the influence of moderation variable interactions on the main relationship. The interaction regression model in this study is formulated as follows:

$$Y_{KP} = \alpha + \beta_1 \text{ ESG} + \sum \beta_k \text{ Control Variables} + \epsilon$$

$$Y_{KP} = \alpha + \beta_1 \text{ ESG} + \beta_2 \text{ BGD} + \sum \beta_k \text{ Control Variables} + \epsilon$$

$$Y_{KP} = \alpha + \beta_1 \text{ ESG} + \beta_2 \text{ BGD} + \beta_3 (\text{ESG} \times \text{BGD}) + \sum \beta_k \text{ Control Variables} + \epsilon$$

Notes:

Y_{KP} = Company performance

α = Constant

$\beta_1, \beta_2, \beta_3$ = Regression coefficient

ESG = Environmental, Social, and Governance

BGD = Board Gender Diversity

ESG × BGD = Interaction variables between ESG and BGD

Control Variables = Control variables (Leverage, Liquidity, Firm Size, and Firm Age)

ϵ = Error term

In this model, the first hypothesis (H1) is supported if the coefficient β_1 is positive and statistically significant. The second hypothesis (H2) regarding the moderating role is accepted if the interaction coefficient β_3 is significant, indicating that gender diversity on the board can modify the strength of the relationship between ESG and firm performance. Significance levels are measured using the (partial) t-test and the (simultaneous) F-test with the coefficient of determination (R^2) to assess the model's ability to explain the variation in the dependent variable.

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RESULT AND DISCUSSION

Descriptive Statistics Descriptive statistical analysis provides an initial overview of the data distribution across 408 observations. Based on Table 2, financial performance variables exhibit considerable variation, with ROA having a mean of 0.044 and a standard deviation of 0.426, while ROE has a negative mean of 0.118. This indicates significant fluctuations in profitability within the consumer cyclicals and non cyclicals sectors during the 2020–2023 period. The negative average ROE value in this study was retained because, conceptually, it reflects the condition of companies incurring losses during a specific period, making it still relevant for analysis and justifying the decision not to exclude the data. The use of the full dataset aims to avoid bias and maintain a true representation of the companies' actual conditions in the research sample. This approach aligns with previous studies that continue to use raw data in empirical analysis without eliminating negative values, as variations in company performance including loss conditions are part of the dynamics influencing the relationship between ESG and corporate performance (Alodat, 2024). Additionally, other studies have shown that corporate performance outcomes, particularly ROA and ROE, can vary both positively and negatively depending on the company's internal conditions and governance factors that moderate these relationships. The main independent variable, the ESG score, has an average of 5.466.597. Meanwhile, the average board gender diversity (BGD) is 14.51%, indicating that women's representation in the board of commissioners' structure among Indonesia's companies remains relatively low, although some companies have already achieved a 100% proportion (scale 1).

Table 2. Results of Descriptive Statistical Tests

Variable	Obs	Mean	Std. dev.	Min	Max
ESG_X	408	5.466597	14.57141	0	59.2798
BGD_M	408	.1451603	.2231329	0	1
ROA_Y1	408	.0442745	.4260053	-1.220581	8.302364
ROE_Y2	408	-.1186813	2.489523	-4.838267	3.126545
Lev	408	1.849208	6.201836	-15.03402	92.50039
Liq	408	2.185787	2.260.497	.0114819	14.80139
FS	408	1.47e+12	3.29e+12	373757	4.84e+13
FA	408	28.38235	1.88121	12	33

Source: Processed data (2026)

Improved Robust Model

Table 3 shows the results of robust testing on the ROA and ROE models after heteroscedasticity correction using robust standard errors. In the ROA model, ESG and BGD variables did not significantly influence ROA. However, the ESG×BGD interaction variable showed a significant effect with a p-value of 0.044, indicating that gender diversity on the board of commissioners moderated the relationship between ESG and ROA. Furthermore, leverage had a significant negative effect on ROA, while liquidity, firm size, and firm age were insignificant.

In the ROE model, ESG, BGD, and the ESG×BGD interaction variables did not significantly influence ROE. These results indicate that gender diversity on the board of commissioners did not moderate the relationship between ESG and ROE. Leverage had a significant negative effect on ROE, while firm age had a significant positive effect. Meanwhile, liquidity and firm size did not significantly influence ROE.

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Table 3. Conclusion of Robust Improvement Results

Model ROA				
Variable	Coefficient	t-stat	p-value	Description
ESG	-5.26e-07	-0.00	0.999	Not significant
BGD	0.1138055	0.89	0.373	Not significant
ESG×BGD	0.0084745	2.04	0.044	Significant
<i>Leverage</i>	-0.0064873	-3.71	0.000	Significant
Liquidity	-0.0022871	-0.26	0.798	Not significant
<i>Firm Size</i>	-2.61e-15	-0.94	0.350	Not significant
<i>Firm Age</i>	0.000141	0.02	0.986	Not significant

Source: Processed data (2026)

Model ROE				
Variable	Coefficient	t-stat	p-value	Description
ESG	-0.014899	-1.62	0.109	Not significant
BGD	0.745557	0.95	0.342	Not significant
ESG×BGD	0.022794	0.68	0.497	Not significant
<i>Leverage</i>	-0.375091	-3.63	0.000	Significant
Liquidity	-0.007227	-0.41	0.685	Not significant
<i>Firm Size</i>	-4.68E-15	-1.15	0.255	Significant
<i>Firm Age</i>	0.127494	2.11	0.037	Not significant

Source: Processed data (2026)

The control variables in this study include leverage, liquidity, firm size, and firm age. The test results show that leverage has a negative and significant effect on firm performance, indicating that high debt levels can reduce a firm's profitability due to increased financial burdens. Meanwhile, liquidity, firm size, and firm age did not significantly influence firm performance in some models. This suggests that a firm's ability to meet short-term obligations, firm size, or length of operation do not necessarily directly impact firm profitability. Nevertheless, control variables are still used to control for factors other than the primary research variables to enhance the accuracy of the analysis.

Pearson Correlation

A Pearson correlation test was conducted to identify relationships among variables and to detect potential multicollinearity in the study. The test results showed that most variables had low to moderate correlation coefficients, suggesting that there were no serious multicollinearity issues. Specifically, the ESG variable showed a very weak and insignificant positive correlation with firm performance, as proxied by ROA (0.0109) and ROE (0.0360), indicating that, simply put, ESG does not yet have a strong relationship with firm performance. The moderating variable gender diversity on the board of commissioners exhibits a negative and significant correlation with ESG at -0.1467 ($p < 0.01$), suggesting that an increase in ESG scores tends to be accompanied by a decrease in gender diversity. The correlations with ROA (0.0668) and ROE (0.0345) are not significant.

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Table 4. Result of the Pearson Correlation Test

	ROA_Y1	ROE_Y2	ESG_X	BGD_M	Lev	Liq	FS	FA
ROA_Y1	1.0000							
ROE_Y2	0.0793	1.0000						
	0.1098							
ESG_X	0.0109	0.0360	1.0000					
	0.8268	0.4683						
BGD_M	0.0668	0.0345	-0.1467*	1.0000				
	0.1782	0.4866	0.0030					
Lev	-0.0936	-0.8313*	0.0130	-0.0260	1.0000			
	0.0589	0.0000	0.7934	0.6004				
Liq	-0.0049	0.0615	-0.1260*	-0.0945	-0.1555*	1.0000		
	0.9221	0.2150	0.0109	0.0565	0.0016			
FS	-0.0219	0.0060	0.0618	-0.0529	-0.0055	-0.0347	1.0000	
	0.6594	0.9033	0.2128	0.2865	0.9124	0.4851		
FA	-0.0027	0.0482	0.1495*	-0.1169*	-0.0101	-0.0342	-0.0006	1.0000
	0.9568	0.3311	0.0025	0.0181	0.8384	0.4905	0.9908	

Source: Processed data (2026)

Model Selection and Classical Assumption Tests

The selection of the panel data regression model was conducted through a series of formal tests. For the ROA model, the results of the Chow test ($p=0.547$) and the Lagrange Multiplier test ($p=1.000$) indicate that the Common Effect Model (CEM) is the most appropriate model. Conversely, for the ROE model, the Chow test ($p=0.000$) and the Hausman test ($p=0.000$) justify the use of the Fixed Effect Model (FEM). Testing of classical assumptions revealed no multicollinearity issues, with a Mean VIF value of 1.04 (below the 10% threshold). However, the Breusch-Pagan test detected heteroscedasticity in both models ($p < 0.05$). To ensure consistent and reliable parameter estimates, this study applied the Robust Standard Error procedure to the CEM (ROA) model and the Cluster Robust Standard Error to the FEM (ROE) model.

Moderated Regression Analysis (MRA)

After model refinement, hypothesis testing was conducted using Moderated Regression Analysis. The estimation results are summarized in Table 5.

Table 5. Moderated Regression Results (Robust Standard Error)

	Model ROA		
	Model 1 (Primary)	Model 2 (Moderator)	Model 3 (Interaction/MRA)
ESG	0.0003528 (0.632)	0.0006277 (0.273)	-0.0000005 (0.999)
BGD	—	0.1248186 (0.318)	0.1138055 (0.373)
ESG × BGD	—	—	0.0084745** (0.044)

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	Model 1 (Primary)	Model 2 (Moderator)	Model 3 (Interaction/MRA)
Leverage	- 0.0066608*** (0.001)	- 0.0064596*** (0.000)	-0.0064873*** (0.000)
Liquidity	-0.0036650 (0.722)	-0.0021286 (0.812)	-0.0022871 (0.798)
FS	-0.0000000 (0.322)	-0.0000000 (0.336)	-0.0000000 (0.350)
FA	-0.0013939 (0.874)	0.0000893 (0.991)	0.0001410 (0.986)
Constant	0.1067696 (0.719)	0.0407180 (0.875)	0.0418909 (0.870)
R-squared	0.0098	0.0139	0.0150
N	408	408	408

Source: Processed data (2026)

Model ROE			
	Model 1 (Primary)	Model 2 (Moderator)	Model 3 (Interaction/MRA)
ESG	-0.0132949* (0.080)	-0.0134897* (0.076)	-0.0148995 (0.109)
BGD	— —	0.8182455 (0.281)	0.7455577 (0.342)
ESG × BGD	— —	— —	0.0227940 (0.497)
Leverage	-0.3754855*** (0.000)	-0.3750012*** (0.000)	-0.3750912*** (0.000)
Liquidity	-0.0066776 (0.720)	-0.0074329 (0.678)	-0.0072271 (0.685)
FS	-0.0000000 (0.118)	-0.0000000 (0.277)	-0.0000000 (0.255)
FA	0.1314350** (0.037)	0.1271863** (0.037)	0.1274941** (0.037)
Constant	-3.0571930* (0.080)	-3.0561020* (0.077)	-3.0549790* (0.078)
R-squared (Within)	0.7823	0.7828	0.7829
N	408	408	408

Source: Processed data (2026)

Discussion

The Effect of ESG on Company Performance

The t-test results indicate that ESG disclosure does not have a significant effect on either ROA or

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ROE. These findings reject Hypotheses 1a and 1b. The lack of a significant effect suggests that in Indonesia, ESG implementation in the manufacturing sector is likely still in its initial stage, where the investment costs for environmental management and social responsibility remain higher than the short-term economic benefits received by companies. The impact of ESG tends to be long-term through improved reputation and efficiency, which may not be immediately reflected in annual profitability ratios (Romano et al., 2020). These results also confirm that the market in Indonesia has not yet fully provided direct financial appreciation for sustainability disclosures.

This finding aligns with research conducted by Almulhim et al. (2025), which found that ESG disclosures do not always have a significant impact on corporate financial performance because their effectiveness depends heavily on the level of ESG integration within the company's business strategy. In many cases, ESG practices remain symbolic or compliance-based, thus failing to deliver tangible economic impacts on corporate profitability in the short term (Buchetti et al., 2025).

These research results are further supported by other empirical findings indicating that the effectiveness of ESG is highly dependent on the quality of corporate governance, including the characteristics of the board of commissioners. Studies by Menicucci & Paolucci (2022) and Dworkin & Schipani (2018) confirm that board diversity can enhance oversight quality and promote the implementation of strategies oriented toward the long term.

Theoretically, these results can be explained through the Stakeholder Theory perspective, which states that companies need to balance the interests of various stakeholders in conducting their business activities. The implementation of ESG is one of the mechanisms companies use to meet stakeholder demands and maintain the company's social legitimacy. However, the economic benefits of such strategies are not always immediately reflected in short-term financial performance, as most of their impacts are long-term and related to enhanced reputation and investor confidence (Freeman et al., 2019)

These research findings are also consistent with several previous studies that found that the impact of ESG on corporate performance is not always significant, particularly in emerging markets. ESG implementation is often still symbolic or compliance-based, thus failing to deliver tangible financial impacts in the short term (Almulhim et al., 2025). Meanwhile, Buchetti et al. (2025) emphasize that the effectiveness of ESG is highly influenced by the quality of corporate governance, including board characteristics and internal oversight mechanisms.

On the other hand, some studies show different results. Research conducted by Popescu et al. (2023) indicates that ESG can have a positive impact on corporate profitability when sustainability practices are effectively integrated into the company's operational strategy. These differing results suggest that the relationship between ESG and corporate performance is heavily influenced by the industry context, the quality of ESG implementation, and the level of corporate governance maturity.

The Moderating Role of Board Gender Diversity

The most intriguing finding in this study is the proven moderating role of board gender diversity (BGD). In the ROA model, the interaction variable (ESG x BGD) has a significant positive effect ($p=0.044$), thus Hypothesis 2a is accepted. This demonstrates that while ESG does not independently impact ROA, its effectiveness in driving financial performance increases when a company has a higher proportion of women on its board of commissioners. Women's characteristics which tend to be more risk-sensitive and long-term oriented help ensure that ESG investments are made strategically and efficiently (Gavana et al., 2025; Heldgaard, 2024).

Conversely, in the ROE model, the moderating effect is only significant at the 10% level ($p=0.090$), so Hypothesis 2b lacks strong support at the standard 5% significance level. This suggests that

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the limited number of women on boards (an average of only 14%) means their influence on policies directly related to shareholder returns is not yet as strong as their influence on the oversight of operational assets (ROA). Overall, this study supports the Upper Echelons Theory that diversity in the board's background is key to translating non-financial activities (ESG) into measurable financial outcomes. One factor that may explain this situation is the still-low proportion of women on the boards of directors in most companies in the study sample. The average gender diversity of boards of directors in this study is only around 14%, meaning that women's influence in corporate strategic decision making processes remains relatively limited.

The leverage variable consistently has a significant negative effect on ROA and ROE. This indicates that high debt burdens are a major hindrance to corporate performance in the consumer sector. Liquidity was also found to have a negative effect on ROE, indicating that an excessive accumulation of current assets (unproductive) can reduce the efficiency of equity returns. Meanwhile, company size and age do not have a significant effect on profitability in this model.

The findings of this study are also consistent with the research by Gavana et al. (2025), which shows that gender diversity on the board can improve the quality of corporate governance and strengthen the effectiveness of oversight of the company's strategic policies. Gender diversity on the board of commissioners contributes positively to corporate performance by enhancing the effectiveness of oversight functions (Thoomaszen & Hidayat, 2020). Additionally, the study by Almulhim et al. (2025), also found that corporate governance characteristics, including board composition can amplify the impact of sustainability practices on corporate performance.

CONCLUSION

This study concludes that Environmental, Social, and Governance (ESG) disclosures do not have a significant direct impact on corporate financial performance, as measured by either Return on Assets (ROA) or Return on Equity (ROE), in the consumer cyclicals and consumer non-cyclicals sectors in Indonesia during the 2020–2023 period. This indicates that the economic benefits of sustainability practices have not yet been fully internalized into short-term profitability and are likely still compliance based. However, this study successfully demonstrated the strategic role of inclusive governance, where gender diversity on the board of commissioners was found to moderate and strengthen the relationship between ESG and ROA. These findings confirm that the presence of women on the board enhances the effectiveness of oversight of operational assets through a more comprehensive risk perspective, although this moderating effect is not yet strong enough to influence return on equity (ROE). As a practical recommendation, companies are encouraged not only to increase the quantity of ESG reporting but also to improve the quality of its implementation, and to begin considering affirmative action policies for women's representation on the board as a driver of strategic value. For future researchers, it is recommended to expand the scope of governance variables such as board independence and use market-based performance measures such as Tobin's Q to capture long-term investors' perceptions of a company's integration of sustainability values.

REFERENCES

Adnindya, A., & Restuti, M. (2024). *ESG And Firm Performance : The Moderating Role Of Board Diversity*. 26(2), 275–290. <https://doi.org/https://doi.org/10.34208/jba.v26i2.2518>

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- Almulhim, A., Bahyeldin, A., & Metwally, M. (2025). ESG disclosure and firm performance : do gender diversity and sustainability committee matter? *Cogent Business & Management*, 12(1). <https://doi.org/10.1080/23311975.2025.2545610>
- Alodat, A. Y. (2024). *Environmental , social and governance (ESG) disclosure and firm performance : Moderating role of board gender diversity and sustainability committee*. <https://doi.org/10.1002/sd.3126>
- Amrullah, F. F., Kartika Sari, A. F., & Nandiroh, U. (2025). *Pengaruh Environmental, Social, dan Governance (ESG) Terhadap Kinerja Keuangan dengan Gender Diversity Sebagai Variabel Moderasi (Studi Kasus pada Perusahaan Perbankan yang Terdaftar di BEI Tahun 2022-2024)*.
- Anggraini, F., Annisa, & Zefriyenni. (2023). Pengaruh Keragaman Gender Dewan dan Earnings Management Terhadap Kinerja Keuangan Perusahaan. *Proaksi*. <https://doi.org/10.32534/jpk.v10i4.4534>
- Ayem, S., & Bobat, M. (2025). Pengaruh Komisaris Independenden dan Pengungkapan ESG terhadap Nilai Perusahaan dengan Profitabilitas sebagai Variabel Moderasi. *Jurnal Literasi Akuntansi*, 5(3), 126–133. <https://doi.org/10.55587/jla.v5i3.178>
- BPS. (2025). Statistik Industri Manufaktur Indonesia 2023 7.1. *Statistik Industri Manufaktur*, 12, 116.
- Buchetti, B., Romana, F., & Perdichizzi, S. (2025). International Review of Financial Analysis A literature review on corporate governance and ESG research : Emerging trends and future directions ☆. *International Review of Financial Analysis*, 97(September 2023), 103759. <https://doi.org/10.1016/j.irfa.2024.103759>
- Clarkson, M. E. (1995). A Stakeholder Framework for Analyzing and Evaluating Corporate Social Performance. *Academy of Management Review*. <https://doi.org/10.5465/amr.1995.9503271994>
- Donaldson, T., & Preston, L. E. E. E. (2017). The Stakeholder Theory of the Corporation : Concepts , Evidence , and Implications. *Academy of Management*. <http://www.jstor.org/stable/258887>
- Dworkin, T. M., & Schipani, C. A. (2018). *The Role of Gender Diversity in Corporate Governance*. [https://doi.org/Dworkin, Terry Morehead and Schipani, Cindy A., The Role of Gender Diversity in Corporate Governance \(December 1, 2018\). 21 University of Pennsylvania Journal of Business Law 105 \(2018\), Ross School of Business Paper No. 1391, Available at SSRN: https://ssrn.com/abstract=3369660 or http://dx.doi.org/10.2139/ssrn.3369660](https://doi.org/Dworkin, Terry Morehead and Schipani, Cindy A., The Role of Gender Diversity in Corporate Governance (December 1, 2018). 21 University of Pennsylvania Journal of Business Law 105 (2018), Ross School of Business Paper No. 1391, Available at SSRN: https://ssrn.com/abstract=3369660 or http://dx.doi.org/10.2139/ssrn.3369660)
- Freeman, R. E., Phillips, R. A., Barney, J. B., & Harrison, J. S. (2019). *Stakeholder Theory*.
- Fujianti, L., Azizah, W., Astuti, S. B., Hilmiyah, N., Lailatul, A., & Pancasila, U. (2024). Good Corporate Governance dan Environmental, Social, Governance Disclosures di Indonesia. *Jurnal Reviu Akuntansi Keuangan*, 14(1), 19–36. <https://doi.org/10.22219/jrak.v14i1.28986>
- Gavana, G., Gottardo, P., & Moisello, A. M. (2025). *The impact of board gender diversity on ESG disclosure . A contingency perspective*. 33(7), 1–29. <https://doi.org/10.1108/MEDAR-07-2024-2567>
- Hambrick, D. C., & Mason, P. A. (1984). *Upper Echelons: The Organization as a Reflection of Its Top Managers*. <https://doi.org/https://doi.org/10.2307/258434>
- Heldgaard, I. M. (2024). *Towards the Triple Bottom Line : Unveiling the Role of Board Diversity in Firm*

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- Financial and ESG Performance*. 1800092_Isabella_Maria_Heldgaard_S138396_Master_s_Thesis
- Ida, I., Tjandrasa, B. B., & Setyawan, S. (2025). *Exploring ESG And Financial Performance : Leverage as Moderator in The Indonesian ConsumerNon-Cyclicals Sector*. <https://doi.org/https://doi.org/10.24034/icobuss.v5i1.784>
- IPCC. (2022). *Climate Change 2022 Mitigation of Climate Change*.
- Jovietha, A. M., Rini, I., & Pangestuti, D. (2024). *PENGARUH ESG DAN BOARD GENDER DIVERSITY TERHADAP PROFITABILITAS PERUSAHAAN (Studi pada Perusahaan Non-keuangan yang Terdaftar di BEI Periode 2018-2022)*. <http://ejournal-s1.undip.ac.id/index.php/dbr>
- Menicucci, E., & Paolucci, G. (2022). *Board Diversity and ESG Performance : Evidence from the Italian Banking Sector*. 1–19. <https://doi.org/10.3390/su142013447>
- Nurjannah, N., & Oktaryani, G. A. S. (2025). *The Impact of Board Gender Diversity, Independent Commissioners, and Meeting Frequency on Financial Performance: Evidence from Indonesia Listed Bank (2019-2023)*. <https://doi.org/https://doi.org/10.31538/ijse.v8i3.7379>
- Popescu, C., Pentescu, A., & Shivarov, A. (2023). *Sustainability , ESG Ratings and Corporate Performance in the Manufacturing Sector : A Research Review*. <https://doi.org/10.24818/ejis.2023.24>
- Rahayu, N. N. A. P., Ustriyana, I. N. G., & Arisena, G. (2025). Comparative Analysis of ESG Scores Based on GRI Standards in Indonesia's Consumer Non-Cyclicals and Consumer Cyclicals Sectors. *BIO Web of Conferences*, 03003. <https://doi.org/https://doi.org/10.1051/bioconf/202519703003>
- Rahmadini, S., & Hartanti, D. (2025). ESG, Financial Performance, and the Moderating Role of ESG Controversies. *Jurnal Dinamika Akuntansi*, 17(1), 34–49. <https://doi.org/10.15294/jda.v17i1.17301>
- Romano, M., Cirillo, A., & Favino, C. (2020). *ESG (Environmental , Social and Governance) Performance and Board Gender Diversity: The Moderating Role of CEO Duality*. <https://doi.org/10.3390/su12219298>
- Sari, T. K., & Fitriani, N. (2023). *Jurnal Akuntansi dan Auditing Indonesia How do board characteristics influence the ESG disclosure in Indonesia ?* <https://doi.org/https://doi.org/10.20885/jaai.vol27.iss2.art9>
- Tanputra, S., Harymawan, I., & Nasih, M. (2023). Board of Commissioners Educational Background And Sustainability Report Quality. *Jurnal Dinamika Akuntansi*, 15(2), 153–165. <https://doi.org/10.15294/jda.v15i2.42263>
- Thoomaszen, S. P., & Hidayat, W. (2020). Keberagaman Gender Dewan Komisaris dan Direksi terhadap Kinerja Perusahaan. *Jurnal Ekonomi Bisnis Dan Akuntansi*, Vol 2 No., 2040–2052. <https://doi.org/https://doi.org/10.24843/EJA.2020.v30.i08.p11>
- UNEP. (2020). International Environmental Technology Centre - Who we are. *Unep*.

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