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ASSESSING THE IMPACT OF ESG ON FINANCIAL PERFORMANCE: EVIDENCE FROM IDX-LISTED COMPANIES (2015–2024)

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ABSTRACT

Objective: This study aims to examine the impact of Environmental, Social, and Governance (ESG) factors on the financial performance of companies listed on the Indonesia Stock Exchange (IDX) during the 2015–2024 period, with financial performance proxied by Return on Assets (ROA).

Research Design & Methods: This study employs a quantitative approach using panel data regression analysis with the Fixed Effects Model (FEM). The sample consists of 132 companies with a total of 1,055 observations (unbalanced panel), selected through purposive sampling. ESG variables are measured through environmental performance, social activities, and governance, proxied by board diversity.

Findings: The results indicate that the Environmental and Social variables have a positive and significant impact on financial performance, suggesting that better environmental practices and social engagement contribute to higher profitability. Conversely, the Governance variable, proxied by board diversity, exhibits a negative impact on ROA. Simultaneously, ESG variables significantly influence financial performance, although the model's explanatory power remains relatively limited.

Contributions: This study contributes to the growing ESG literature, particularly in the context of emerging markets, by providing empirical evidence on how sustainability practices influence corporate financial performance.

Novelty: The novelty of this research lies in the extended observation period (2015–2024), the use of board diversity as a proxy for governance, and the focus on companies listed in Indonesia using an unbalanced panel dataset.

Keywords: Environmental Social Governance (ESG), Financial Performance**,** Corporate Sustainability

JEL codes: G30, M14, Q56

Article type: research paper

INTRODUCTION

The global business paradigm has undergone a significant shift over the past two decades, with companies no longer focused solely on achieving financial profits but also required to meet increasingly complex stakeholder expectations, including in the areas of environmental sustainability, social welfare, and transparent corporate governance. In this context, the concept of Environmental, Social, and Governance (ESG) has emerged as a key instrument for assessing corporate sustainability and has evolved into a critical consideration in investment decision-making. The increased focus on ESG aligns with growing global awareness of the impacts of climate change and socio-economic crises, as evidenced by the Intergovernmental Panel on Climate Change (IPCC) (2021) which indicates that industrial activities, including the manufacturing, chemical, and cement sectors account for approximately 24% of total global carbon dioxide emissions.

Developments in global capital markets also show a similar trend, with the increasing use of ESG-based indices such as the Dow Jones Sustainability Index (DJSI) and the MSCI ESG Leaders Index as benchmarks for investors. This trend is supported by the findings of a meta-analysis of more than 2,000 studies, which indicate that nearly 90% of these studies show a positive correlation between sustainability practices and financial performance, thereby reinforcing the legitimacy of ESG as a source of long-term competitive advantage (Intergovernmental Panel on Climate Change (IPCC), 2021). In the ASEAN region, the implementation of ESG continues to grow, with countries such as Singapore, Malaysia, and Thailand having already integrated ESG into capital market regulations, while Indonesia is beginning to show progress through policies by the Financial Services Authority (OJK), including the first phase (2015–2019) and second phase (2021–2025) of the Sustainable Finance Roadmap, as well as the implementation of OJK Regulation No. 51/POJK.03/2017, which requires companies to

prepare sustainability reports. The impact of these policies is evident in the increase in the number of companies reporting on sustainability, from around 12 companies in 2015 to more than 150 companies in 2023 (Agustina & Pradesa, 2024). Although the adoption of ESG has shown quantitative growth, the quality of its implementation remains a challenge, as many companies focus solely on administrative compliance without strategically integrating it, thereby giving rise to greenwashing practices. Furthermore, ESG is also viewed as a risk mitigation tool, where companies with strong ESG performance tend to be more resilient in the face of crises, as seen during the COVID-19 pandemic, when companies that prioritized social aspects such as employee well-being and workplace safety were better able to maintain operational stability compared to those that neglected them (Broadstock et al., 2021).

The manufacturing sector is one of the main pillars of the Indonesian economy, serving as the backbone of industrialization through its significant contribution to Gross Domestic Product (GDP), employment, and the creation of value added from production activities. In developing countries like Indonesia, this sector acts as a driver of relatively stable economic growth compared to the oil and gas sector, which is vulnerable to global price fluctuations. Badan Pusat Statistik (2024) indicates that the manufacturing sector's contribution reached 18.34% of GDP in 2022, making it the largest contributor among all sectors and employing over 18 million workers both directly and indirectly.

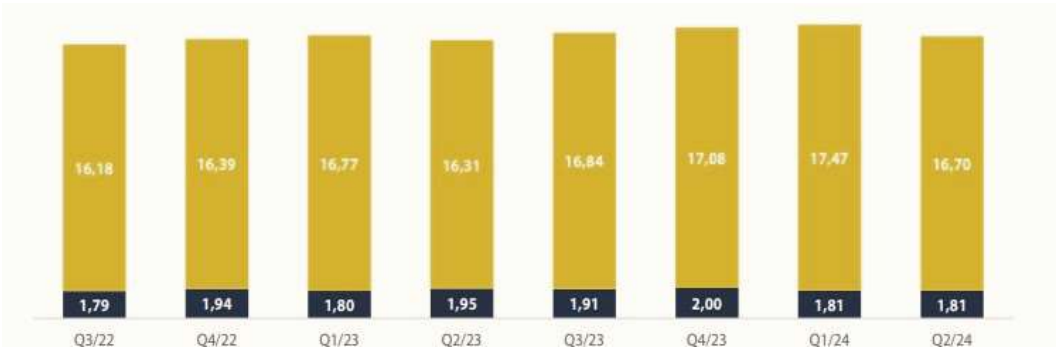

Figure 1. Contribution of the Manufacturing Industry

Source: Indonesia Quarterly Gross Domestic Product (Central Statistics Agency)

The manufacturing sector's contribution to the national Gross Domestic Product (GDP) during the 2022–2024 period shows a relatively stable trend with a gradual upward trajectory. The figure rose from 16.18% in the third quarter of 2022 to 16.77% in the first quarter of 2023, although it experienced a slight decline in the second quarter of 2023 to 16.31%. After that, the contribution rose again, peaking at 17.47% in the first quarter of 2024, before declining slightly to 16.70% in the second quarter of 2024. Overall, the fluctuations were not significant, reflecting that the manufacturing sector remains consistent and plays a vital role as a key pillar of the national economy.

The implementation of Environmental, Social, and Governance (ESG) principles in Indonesia's manufacturing sector still faces significant challenges, particularly in the environmental aspect. The industrial sector is known to be one of the main contributors to national greenhouse gas emissions, accounting for approximately 32% of Indonesia's total carbon emissions, the majority of which originate from the cement, steel, and textile subsectors (Kementrian Lingkungan Hidup dan Kehutanan, 2022). This situation positions the manufacturing sector as a strategic sector that is required to immediately undergo a transformation toward the use of clean energy and improved production efficiency, particularly to avoid international trade barriers such as the Carbon Border Adjustment Mechanism (CBAM) policy that is beginning to be implemented in Europe (Zhong & Pei, 2024). However, these efforts often fail to yield optimal results due to the phenomenon of greenwashing, where companies tend to merely project a sustainable image through reports without accompanying them with tangible implementation. This is evident in corporate practices where companies report on environmental programs such as reforestation or CSR initiatives, yet continue to use inefficient production technologies that may pollute the environment, thereby creating a gap between public expectations and actual conditions on the ground (Rahmawati & Chariri, 2024).

Environmental performance measurement in Indonesia is conducted through the PROPER program, which classifies companies into five tiers (Gold, Green, Blue, Red, Black), reflecting their levels of environmental compliance and innovation (Kementerian Lingkungan Hidup/Badan Pengendalian Lingkungan Hidup, 2025). Empirically, good environmental performance has been shown to improve efficiency and reduce operational costs, as well as positively impact Return on Assets (ROA), although in the short term it may reduce profitability due to the high costs of investing in environmentally friendly technology. From the social perspective (Social), the manufacturing sector faces labor issues such as minimum wages, long working hours, and weak occupational safety protections (Horne & Andrade, 2016). BPS data shows an upward trend in the monthly wage index for the 2012–2016 period, reflecting improved worker welfare, yet also creating cost pressures for companies. In this context, the disclosure of Corporate Social Responsibility (CSR) through the CSR Disclosure Index (CSRDI) has been shown

to have a positive impact on ROA and ROE, although its effectiveness depends heavily on the quality of implementation rather than mere formalities (greenwashing).

The main challenge in terms of governance lies in the low levels of transparency and accountability, as reflected in Indonesia's Corruption Perceptions Index score of 34 out of 100 in 2023 (Transparency International, 2023). Good governance, including board diversity, has been shown to improve the quality of financial reporting and corporate performance, although research findings still indicate inconsistencies regarding its effectiveness (Pramisti & Istiqomah, 2024; Serly et al., 2023). Additionally, there are various structural barriers to ESG implementation in Indonesia, such as low corporate compliance with sustainability reporting (only around 150 out of over 800 listed companies), low investor literacy regarding ESG (29.7%) (Otoritas Jasa Keuangan, 2020), limited financial and technological resources, and weak enforcement of environmental laws. Various cases such as environmental pollution, data breaches, and financial statement manipulation indicate that ESG implementation remains suboptimal. Nevertheless, various initiatives such as the launch of the IDX-ESG Leaders index and regulatory strengthening by the OJK indicate growing attention to ESG in Indonesia.

Therefore, research on the impact of Environmental, Social, and Governance (ESG) on corporate financial performance, particularly in the manufacturing sector, is crucial for understanding the extent to which ESG implementation can provide added value and create competitive advantage for companies. Specifically, this study aims to analyze the influence of each ESG dimension environmental, social, and governance both partially and simultaneously on Return on Assets (ROA), thereby providing a more comprehensive picture of ESG's contribution to improving corporate financial performance.

LITERATURE REVIEW

Corporate Financial Performance

Financial performance is a key indicator that reflects management's success in effectively and efficiently managing the company's resources to achieve organizational goals within a specific period. It focuses not only on profit but also illustrates the quality of strategic decision-making, the ability to utilize assets, and the effectiveness of cost and capital management, all of which impact corporate value creation and stakeholder trust. Financial performance evaluation serves as a crucial foundation for management in designing strategies, implementing improvements, and ensuring business sustainability in the future (Alarussi & Alhaderi, 2018; Oktavianus et al., 2024). Regarding sustainability and social responsibility, ESG (Environmental, Social, and Governance) scores enhance a company's financial performance, particularly for companies with low carbon emissions. This underscores the importance of sustainability strategies, such as reducing the carbon footprint, in creating competitive advantages and long-term financial success (Setiani et al., 2024). This study measures financial performance using Return on Assets (ROA), which indicates a company's ability to generate profit from its total assets while reflecting resource efficiency and overall managerial performance.

The signaling theory perspective views financial performance as a key signal that companies use to reduce information asymmetry between management and external parties, particularly investors. Companies convey information through financial statements as a form of strategic communication to demonstrate management quality and future business prospects. Indicators such as Return on Assets (ROA) serve as positive signals when they demonstrate efficient asset management and the ability to generate profits, thereby boosting investor confidence and perceptions of corporate value. Conversely, a decline in financial performance can be interpreted as a negative signal that has the potential to erode market confidence. Recent research indicates that the disclosure of financial and non-financial information, including ESG, is used by companies as a signaling mechanism to shape investor perceptions and improve corporate performance and value (Paramita & Prasetio, 2025).

Meanwhile, from the perspective of legitimacy theory, financial performance serves not only as a tool for internal evaluation but also as a means of obtaining and maintaining social legitimacy from the public and stakeholders. Companies must ensure that their activities align with social norms, values, and expectations in order to continue receiving support. Good financial performance reflects sound business practices, good governance, and efficient use of resources, thereby enhancing public trust. Conversely, poor performance can cast doubt on a company's credibility and threaten its operational legitimacy. An empirical study by Lee and Raschke (2023) demonstrates that stakeholder legitimacy plays a crucial role in the relationship between ESG performance and financial performance, and influences public perception of the company.

Environmental Performance

Environmental performance has become a critical aspect in the evaluation of modern companies, as it focuses not only on profit generation but also on the extent to which a company's operational activities impact environmental sustainability. In the context of growing global issues such as climate change, resource exploitation, and environmental degradation, companies are required to demonstrate tangible commitment through CO_2 emissions management, energy efficiency, waste management, and eco-friendly policies as part of the Environmental (ENV) index (Alareeni & Hamdan, 2020). Good environmental performance not only reflects a company's ecological responsibility but also plays a role in enhancing legitimacy in the eyes of the public and

regulators, in line with the perspective of legitimacy theory, which emphasizes the importance of alignment between corporate activities and prevailing social values. With maintained legitimacy, companies can reduce reputational risk, increase investor confidence, and potentially improve financial performance such as ROA and market value (Cahyani & Puspitasari, 2023).

Environmental performance refers to a company's ability to manage the environmental impacts of its operations, including waste management, energy efficiency, emissions control, and the conservation of natural resources. In Indonesia, environmental performance is measured through the Corporate Performance Rating Program (PROPER), developed by the Ministry of Environment and Forestry (KLHK) since 2002, with the aim of encouraging corporate compliance with environmental regulations while achieving performance beyond compliance (Kementerian Lingkungan Hidup/Badan Pengendalian Lingkungan Hidup, 2025). PROPER evaluates various aspects such as pollution control, hazardous waste management, energy efficiency, resource conservation, biodiversity conservation, and environmental social responsibility through mechanisms of audit, verification, and periodic monitoring (Kementerian Lingkungan Hidup/Badan Pengendalian Lingkungan Hidup, 2025). The evaluation results are then classified into color-coded rankings: gold, green, blue, red, and black, reflecting the company's performance and compliance levels (Afsah et al., 2013). Therefore, in this study, environmental performance is proxied using the PROPER rating because it is considered objective, standardized, and capable of providing a comprehensive picture of a company's environmental performance, both in terms of compliance and long-term sustainability innovation.

Social Performance

The social aspect of a company reflects how the organization treats individuals both within and outside the company in a fair, ethical, and responsible manner, and ensures that all operational activities align with human values and applicable regulations. Extending beyond ceremonial activities such as donations or community service, this aspect encompasses the disclosure of corporate social responsibility (CSR), measured through various indicators such as fair trade practices, gender equality, workforce size and well-being, employee turnover rates, and the representation of women in management. Social performance also reflects the company's commitment to fulfilling its social responsibilities through labor protection, compliance with labor laws, and efforts to develop employee education and skills. Furthermore, the social aspect is closely tied to how the company maintains the quality of its products and services and their impact on the community, thereby demonstrating the extent to which the company is able to create sustainable value for society at large (Chen et al., 2022; Fatemi et al., 2018).

CSR obligations in Indonesia are regulated by Law No. 40 of 2007, Article 74, on Limited Liability Companies, as well as Government Regulation No. 47 of 2012, which requires companies, particularly those operating in the natural resources sector to fulfill their social and environmental responsibilities. From an academic perspective, the application of social aspects in CSR is closely linked to stakeholder theory, which asserts that companies are not only accountable to shareholders but also to all stakeholders, such as employees, the community, the government, and consumers (Freeman et al., 2021). Companies that are able to effectively manage social aspects, for example, through labor protection, regulatory compliance, and contributions to community welfare will foster more harmonious relationships with their stakeholders (Amadi & Zhao, 2020). This ultimately has a positive impact on the company's long-term performance, such as increased consumer loyalty, public support, and employee productivity.

Governance Performance

Corporate governance serves as the cornerstone for ensuring that a company's management and control processes operate in a transparent, accountable, responsible, independent, and fair manner. This concept emphasizes that a company should not only focus on achieving short-term profits but also on creating long-term value for all stakeholders. Within the ESG framework, the governance aspect plays a strategic role in minimizing agency conflicts between management and shareholders through effective oversight mechanisms. Elements such as the structure of the board of commissioners, the proportion of independent commissioners, the quality of the audit committee, and the level of transparency in financial reporting serve as key indicators in assessing the quality of corporate governance. The implementation of good governance not only enhances investor confidence but also reduces operational and reputational risks, strengthens corporate stability, and drives sustainable improvements in financial performance and corporate value (Oktadewi & Diantini, 2025). Furthermore, strong corporate governance plays a role in ensuring regulatory compliance and promoting ethical and responsible business practices, thereby enabling the company to maintain its legitimacy in the public eye.

In the context of this study, the governance aspect focuses on board diversity, particularly gender diversity, which is believed to have a significant impact on the effectiveness of decision-making and the quality of management oversight. The presence of women on the board of directors or commissioners provides a more diverse perspective, thereby enhancing the quality of discussions, reducing bias in decision-making, and strengthening the monitoring function over management. Women are generally associated with a higher degree of caution in risk-taking and greater sensitivity to ethical, social, and sustainability issues, which ultimately contribute to improved corporate governance quality. Gender diversity also fosters innovation and creativity in formulating business strategies, making companies more adaptive to changes in the external environment. Therefore, the higher the

level of gender diversity on the board, the greater the company's opportunity to improve performance—both financially and non-financially and to strengthen its long-term competitiveness and sustainability. A number of empirical studies show that gender diversity on the board contributes positively to corporate performance, both financially and non-financially, as it fosters more diverse perspectives, innovation, and more effective oversight of management (Adams & Ferreira, 2009; Beltran, 2019; Post & Byron, 2015).

Theoretical Framework and Hypotheses

The theoretical framework of this study examines the relationship between environmental, social, and governance (ESG) disclosures, as independent variables and corporate performance as the dependent variable. Environmental disclosures reflect a company's commitment to environmental management; social disclosures indicate responsibility toward employees and the community; and governance disclosures represent the quality of corporate governance. These three aspects play a role in enhancing a company's reputation, investor confidence, and operational efficiency. The research model indicates that the better the ESG disclosure, the more likely corporate performance is to improve. This relationship reflects that corporate transparency and accountability can create added value, strengthen stakeholder trust, and support business sustainability. Therefore, this study examines the influence of environmental, social, and governance disclosures on corporate performance among companies listed on the Indonesia Stock Exchange for the period 2015–2024, as outlined in the theoretical framework.

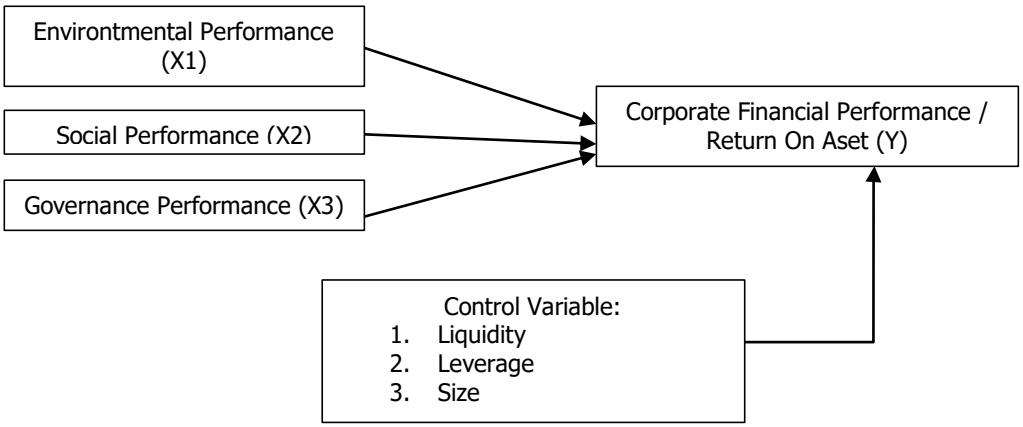

Figure 2. Theoretical Framework

Based on this framework, the hypotheses of this study are formulated as follows:
H1: Environmental performance has a positive effect on a company's financial performance.
H2: Social performance has a positive effect on a company's financial performance.
H3: Governance performance has a positive effect on a company's financial performance.

METHODS

This study employs a descriptive quantitative approach using secondary data obtained from published official documents. The primary data is sourced from annual reports and sustainability reports of companies listed on the Indonesia Stock Exchange (IDX) via the official website www.idx.co.id, as well as the respective entities' websites. Annual reports were used to obtain information regarding the companies' financial condition, such as balance sheets, income statements, and other financial performance indicators, while sustainability reports were used to identify disclosures related to environmental, social, and governance (ESG) aspects. Additionally, environmental performance data was obtained from the Corporate Performance Rating Assessment Program (PROPER) issued by the Ministry of Environment and Forestry (KLHK), which classifies companies' environmental performance using a color-coded rating system as an objective indicator of the implementation of environmentally friendly practices. Supplementary data was also obtained from each company's official website to complement information not available in the published reports. The observation period in this study covers the years 2015 through 2024.

The population in this study consists of all manufacturing companies listed on the Indonesia Stock Exchange (IDX), with the sample selected using purposive sampling based on specific criteria: companies that have been consistently listed throughout the study period and companies participating in the Ministry of Environment and Forestry's (KLHK) PROPER program. The manufacturing sector was selected due to its significant contribution to the national economy as well as its substantial impact on environmental and social aspects, making it relevant to ESG analysis. Based on the sample selection process, the following results were obtained:

Table 1. Data Collection Results

No.	Description	Total
1.	Companies listed on the Indonesia Stock Exchange (IDX) during the 2015–2024 period	955
2.	Companies included in the Corporate Performance Rating Program (PROPER) issued by the Ministry of Environment and Forestry (KLHK) during the observation period	132
	The total of companies in the research sample	132
	Years of observation	10 years
	Total sample in the study (unbalanced panel)	1.055

The data collection method in this study employs a documentary approach, which involves obtaining secondary data through official documents published by relevant institutions and companies. This approach was chosen because the study focuses on the disclosure of information related to Environmental, Social, and Governance (ESG) aspects, as well as the financial performance of companies as recorded in annual reports and sustainability reports. Data processing was conducted systematically to transform raw data into a panel dataset ready for analysis, beginning with checks for data completeness and consistency, converting PROPER ratings into a numerical scale, and tabulating data based on cross-sectional and time-series dimensions. Financial ratios were calculated for the dependent variable, namely Return on Assets (ROA), while the independent variables included Environmental (PROPER), Social (CSR), and Governance (Board Diversity). Control variables such as Liquidity, Leverage, and Firm Size were also calculated using standard ratios so that all data could be further analyzed using Stata 18.

Data analysis was conducted using panel data regression to test the impact of ESG variables on corporate financial performance, while simultaneously accounting for both time and firm-level dimensions. The choice of estimation model was determined through the Chow test, the Hausman test, and the Lagrange Multiplier (LM) test to identify whether the Common Effects, Fixed Effects, or Random Effects model was most appropriate. Descriptive statistics were used to describe the characteristics of the research variables, such as mean, standard deviation, maximum, minimum, skewness, and kurtosis. Hypothesis testing included the coefficient of determination (R^2) test, the F-test to determine the simultaneous effect of independent variables, and the t-test to assess the partial effect of each variable on ROA. With a sample size of 1,055 observations from 132 companies over the 2015–2024 period, this panel regression model is capable of capturing the dynamics of variable changes and effectively accommodating inter-firm heterogeneity.

RESULT

Descriptive Statistics

Descriptive statistical analysis is used to describe the characteristics of the data for each research variable, including the dependent variable (Return on Assets/ROA), independent variables (Environmental, Social, Governance), and control variables (Size, Sustainability Report, Liquidity). This analysis provides an overview of the data, including the minimum, maximum, mean, and standard deviation for each variable.

Table 2. Results of Descriptive Statistical Tests

Variable	Obs	Mean	Std. Dev.	Min	Max
Env	1055	3.228	.621	2	5
CSR	1055	.753	.169	0	1
BD	1055	.275	.151	0	.667
ROA	1055	.082	.151	-1.014	2.134
Liquidiy	1055	1.747	.848	.514	7.384
Lev	1055	2.109	18.635	-5.796	378.049
Size	1055	19.661	5.795	2.513	27.746

Source: Processed data

Based on the analysis results, the average ROA of 0.082 indicates that manufacturing companies in Indonesia are able to generate a net profit of approximately 8.2% of total assets, with extreme values ranging from –1.014 to 2.134, influenced by differences in industrial subsector characteristics. The Environmental variable has a mean of 3.228 with a standard deviation of 0.621, indicating that most companies have implemented environmental practices in line with the "Blue-Green" PROPER rating, although there is variation among companies. The Social value, proxied through CSR, averages 0.753 with a range of 0–1, indicating a fairly high level of social responsibility disclosure; however, gaps still exist among companies, particularly between

large firms that are more active in reporting and small firms that focus more on core operations. Governance, measured through board diversity, has an average of 0.275, indicating that board diversity remains limited, with a standard deviation of 0.151 signaling differences among companies in governance structures.

The average liquidity ratio of 1.747 indicates that companies generally have a fairly strong ability to meet their short-term obligations, although some companies have very low or very high ratios. The average leverage ratio of 2.109 indicates that debt is used at approximately twice the level of equity, but extreme variations—reaching as high as 378.049—reflect significant differences in funding structures across industrial subsectors. The average company size of 19,661 indicates that most companies fall into the medium to large category, with a fairly wide range, reflecting differences in operational capacity and resources that affect companies' ability to adopt sustainable practices and achieve operational efficiency.

Model Analysis

The model analysis in this study was conducted to determine the most appropriate panel data regression model for testing the effects of Environmental, Social, and Governance (ESG) variables and control variables on Return on Assets. Model selection began with the Chow test, which aims to determine whether the best model is the Fixed Effects Model (FEM) or the Common Effects Model (CEM). The model selection decision in the Chow Test is based on the F-statistic. If the probability of F is greater than 0.05, then H0 is accepted and the CEM is considered the best model; conversely, if the probability of F is less than 0.05, H0 is rejected and the FEM becomes the best model. Based on the results of the Chow test shown in Table 5, a Prob > F value of 0.0000 was obtained, so H0 is rejected and Ha is accepted. Thus, the best model selected from the Chow test is the Fixed Effects Model (FEM), and the analysis continues with the Hausman test to confirm the choice between the FEM and the Random Effects Model (REM).

Table 3. Results of the Chow Test

	Model
Prob > F	0.0000

Source: Processed data

Next, the Hausman test was conducted to determine the most appropriate regression model between FEM and REM. In the Hausman test, the decision is based on the Prob > chi2 value; if Prob > chi2 is greater than 0.05, REM is selected as the best model, whereas if Prob > chi2 is less than 0.05, FEM is the most appropriate model. The results of the Hausman test shown in Table 6 indicate a Prob > chi2 value of 0.0000, which is less than 0.05. Thus, H0 is rejected and Ha is accepted, leading to the conclusion that the most appropriate panel data regression model for this study is the Fixed Effects Model (FEM). These results confirm that inter-firm variation in the sample cannot be ignored and that each entity has unique characteristics that influence financial performance; thus, the FEM is the most appropriate estimation model to use in the panel data regression analysis of this study.

Table 4. Hausman Test Results

	Model
Prob > chi2	0.0000

Source: Processed data

Hypothesis Testing

The panel data regression analysis in this study uses the Fixed Effects Model (FEM) to test the influence of Environmental (X1), Social (X2), and Governance (X3) disclosures on corporate financial performance, proxied by Return on Assets (ROA), with Liquidity (X4), Sustainability Report (X5), and firm size (Size/X6) as control variables. The regression estimation results are shown in Table 7, where the coefficient for the Environmental variable is 0.014, indicating that companies with better environmental performance tend to have higher ROA. The Social (CSR) variable has a coefficient of −0.124, suggesting that expenditures on social activities have not yet yielded direct financial benefits. Board Diversity (BD) shows a positive coefficient of 0.034, but its effect is statistically relatively weak. For the control variables, Liquidity, Sustainability Report, and Size each have very small or negative coefficients, indicating an insignificant effect on ROA during the study period.

Table 5. Results of Panel Data Regression Using a Fixed Effects Model

Y (ROA)	Coefficient
Env	.014
CSR	-.124
BD	.034
Liquidity	.0003
Sustainibility Report	0
Size	-.012

Source: Processed data

The model's coefficient of determination (R-squared) of 0.017 indicates that the independent and control variables together explain only 1.7% of the variation in financial performance; thus, most of the variation in ROA is influenced by factors outside the model, such as macroeconomic conditions, industry competition, and corporate operational strategies (Table 8). The F-test results show a Prob > Chi2 value of 0.034, which is less than 0.05, indicating that all independent variables collectively have a significant effect on ROA.

Table 6. Coefficient of Determination Results

	Model
R-squared	0.017

Source: Processed data

To determine the simultaneous effect of the independent variables on the company's financial performance, as proxied by Return on Assets (ROA), an F-test was conducted. The results of the F-test in Table 9 show a Prob > Chi2 value of 0.034, which is less than 0.05. This indicates that the null hypothesis is rejected, so it can be concluded that all independent variables collectively have a significant effect on ROA.

Table 7. F-test Results

	Model
Prob > chi2	0.034

Source: Processed data

Furthermore, a t-test was conducted to determine the individual effects of the variables. Based on Table 10, the Environmental variable has a coefficient of 0.0327 with a p-value of 0.000, indicating a positive and significant effect on ROA. The Social (CSR) variable has a coefficient of 0.0190 with a p-value of 0.05, meaning it has a positive and significant effect. Meanwhile, Board Diversity (BD) showed a coefficient of 0.0405 with a p-value of 0.187, Liquidity 0.0051 (p-value 0.347), Sustainability Report −0.0004 (p-value 0.084), and Size 0.0007 (p-value 0.412), all of which are not partially significant for ROA. These results confirm that only Environmental and Social performance are proven to have a positive effect on corporate profitability, while Governance performance and other control variables do not have a significant individual effect.

Table 8. T-test Results

ROA	Coefficient	Std. err.	t	P>t
Env	0.032655	0.007447	4.39	0
CSR	0.019	0.028255	0.67	0.05
BD	0.040479	0.030624	1.32	0.19
Liquidity	0.005112	0.005437	0.94	0.35
Lev	-0.000428	0.000247	-1.7	0.08
Size	0.000675	0.000823	0.82	0.41
_cons	-0.069949	0.036221	-1.9	0.05

Source: Processed data

Based on the overall test results, the hypothesis stating that environmental and social performance have a positive effect on a company's financial performance is accepted, while the hypothesis regarding governance performance is rejected, as shown in the summary table below:

Table 9. Summary of Hypothesis Test Results

Hypothesis	Result
H1: Environmental performance has a positive effect on a company's financial performance.	Accepted
H2: Social performance has a positive effect on a company's financial performance.	Accepted
H3: Governance performance has a positive effect on a company's financial performance.	Rejected

Source: Processed data

DISCUSSION

Environmental Performance Has a Positive Impact on a Company's Financial Performance

Research findings indicating that the Environmental Performance variable has a positive and significant impact on financial performance (ROA) reflect the conclusions of numerous academic studies that view environmental management as an integral part of a company's sustainable strategy. Theoretically, the stakeholder value and resource-based view approaches assert that good environmental management not only reduces negative impacts on the environment but also improves operational efficiency through waste reduction, more effective energy use, and enhanced production processes that lower long-term costs, which ultimately can be reflected in profitability ratios such as ROA. Various global empirical studies show a similar trend: companies with higher ESG (Environmental, Social, and Governance) scores tend to have better financial performance due to cost efficiencies and an enhanced reputation in the eyes of investors and consumers.

The results align with the view in Legitimacy Theory that companies which take environmental performance seriously garner stronger social support from stakeholders. When a company demonstrates a commitment to meeting environmental standards, for example, through emissions reduction programs, waste management, or investment in clean technology, this is seen as proof that the company is acting in accordance with societal norms and expectations. Thus, this legitimacy is not merely a "compliance cost," but also a strategic asset that can reduce potential social conflicts, litigation risks, and future regulatory pressures, which indirectly strengthens financial performance stability. This approach is supported by the literature of Yavuz et al., (2025) which states that improved ESG scores are often associated with lower perceived risk and better management capabilities in addressing external challenges, which in turn attract investment flows and market support.

Furthermore, from the perspective of signaling theory, strong environmental performance can be viewed as a positive signal to the capital markets and investors that the company is focused not only on short-term profits but also on long-term sustainability. Investors are increasingly paying attention to non-financial information, such as environmental indicators, as part of their assessment of management quality and a company's risk outlook. By disclosing strong environmental performance, a company signals that management possesses the capabilities and strategic vision to create long-term value, thereby enhancing investor confidence and reducing the cost of capital. These findings are supported by research by Putra and Budastra (2024) which demonstrates a positive relationship between environmental performance and corporate profitability in the context of both manufacturing firms and across various industries, where improvements in environmental aspects contribute to positive market perceptions and increased operational profitability as measured by ROA.

The study by Zainab and Burhany (2020) specifically found a positive relationship between environmental performance and financial performance in manufacturing companies, as evidenced by ROA figures, thereby reinforcing the finding that environmental aspects are not merely regulatory obligations but also provide tangible economic value to companies. Furthermore, another meta-analysis found aggregate evidence that the relationship between ESG (including the environmental dimension) and financial performance is positive across many contexts, although there is variation depending on the industry sector and firm size (Widyawati, 2025). The environmental aspect, therefore, is not merely about fulfilling regulatory obligations but also plays a strategic role in improving operational efficiency, strengthening the company's reputation in the eyes of stakeholders, attracting investor interest, and creating long-term economic value that directly contributes to improved corporate financial performance.

Social Performance Has a Positive Effect on a Company's Financial Performance

The test results show that the Social variable, measured through Corporate Social Responsibility (CSR) disclosure, has a positive coefficient of 0.019 at a significance level of 0.05. This value falls exactly at the 5% significance threshold; therefore, it can be statistically concluded that social performance has a positive and significant effect on a company's financial performance. In other words, the second hypothesis, which states that social performance has a positive effect on financial performance, is accepted. This finding confirms that the higher the level of disclosure and implementation of a company's social activities, the better the resulting financial performance, highlighting the importance of managing social responsibility as a strategy that not only fulfills ethical obligations but also contributes to the achievement of business objectives.

Corporate social activities, such as responsibility toward employees, customers, and the local community, play a crucial role in building a positive image and enhancing the company's reputation in the public eye. A good reputation can strengthen customer loyalty and boost investor confidence, which ultimately leads to increased profitability. Companies that consistently implement CSR programs demonstrate genuine concern for the interests of stakeholders, which not only improves social relations but also creates long-term economic value through increased sales, customer loyalty, and the potential to secure support from external parties, including the government and local communities.

Based on the legitimacy theory, companies that are active in social activities are able to gain recognition and legitimacy from the public and stakeholders, which is essential for maintaining operational sustainability, particularly in the manufacturing sector, which frequently faces social and environmental issues. Furthermore, from the perspective of signaling theory, CSR disclosures serve as a positive signal to the market regarding the company's commitment to sustainability and social responsibility. Investors and external parties tend to view socially responsible companies as entities with sound management and a long-term orientation; thus, CSR disclosures not only enhance trust and expand access to funding but also support profit growth and the overall stability of the company's financial performance.

Governance Performance Has a Positive Effect on a Company's Financial Performance

The results of the analysis indicate that the Governance variable, measured through Board Diversity, has a positive but insignificant coefficient on Return on Assets (ROA). Thus, the third hypothesis (H3), which states that governance performance has a positive effect on financial performance, is not empirically supported. This finding indicates that although board diversity can create a positive image of corporate governance, its impact has not yet been clearly evident in improved financial performance. Within the framework of Legitimacy theory, board diversity does have the potential to strengthen public and stakeholder perceptions regarding the quality of corporate governance; however, this influence has not yet been translated into measurable operational efficiency or profitability.

The diversity of a board of directors can be viewed, from the perspective of signaling theory, as an indicator of a company's commitment to inclusive, transparent, and accountable governance practices. However, this signal is not strong enough to directly influence investor decisions unless it is accompanied by the board's effective strategic role in business decision-making. Contextual factors also play a significant role; for example, in collectivist cultures and hierarchical organizational structures such as those in Indonesia, the presence of female or minority board members is not always accompanied by a balanced distribution of power and influence in strategic decision-making processes. This means that formal diversity does not necessarily reflect substantial diversity in managerial influence.

Furthermore, the proportion of women on corporate boards in Indonesia remains relatively low, resulting in limited data variation across companies, which may reduce the statistical power of the analysis in demonstrating a direct impact on profitability. The positive effects of board diversity tend to be long-term, stemming from improvements in oversight, risk management, and corporate reputation—factors that may not be directly reflected in short-term financial performance indicators such as ROA. Furthermore, governance effectiveness depends not only on board composition but also on the quality of governance implementation, organizational culture, board independence, and other oversight mechanisms. Therefore, using Board Diversity as the sole proxy for governance may not be sufficient to fully capture the complexity of corporate governance.

CONCLUSION

This study aims to analyze the impact of Environmental, Social, and Governance (ESG) performance on the financial performance of manufacturing companies listed on the Indonesia Stock Exchange for the 2015–2024 period using Return on Assets (ROA) as a proxy for financial performance, and including liquidity, sustainability reports, and company size as control variables. Based on panel data regression analysis with the Fixed Effect Model (FEM) approach, the results show that environmental and social performance have a positive and significant effect on ROA, indicating that attention to environmental aspects and corporate social activities not only reflects social responsibility but also increases profitability by increasing public trust, reputation, and investor interest. Meanwhile, governance performance, as proxied by board diversity, shows a positive but insignificant effect, indicating that corporate governance implementation is not yet optimal in improving efficiency and financial performance. Overall, the environmental and social dimensions are proven to be more dominant in supporting improved financial performance compared to governance aspects. The theoretical implications of these findings strengthen stakeholder and legitimacy theories that emphasize the importance of meeting stakeholder expectations in improving corporate performance, and demonstrate that ESG is a strategy capable of creating economic value. In addition, the results of this study also emphasize the importance of a multidimensional approach in ESG studies, while also showing that agency theory in the context of governance has not been fully realized, thus opening up opportunities for further research to explore the factors that influence the effectiveness of governance in improving corporate financial performance.

REFERENCES

Adams, R. B., & Ferreira, D. (2009). Women in the Boardroom and Their Impact on Governance and Performance. *Journal of Financial Economics*, *94*(2), 291–309. https://doi.org/10.1016/j.jfineco.2008.10.007

Afsah, S., Blackman, A., Garcia, J. H., & Sterner, T. (2013). *Environmental Regulation and Public Disclosure*. Routledge. https://doi.org/10.4324/9780203076729

Agustina, I., & Pradesa, H. A. (2024). Praktek Pelaporan Keberlanjutan Di Indonesia: Sebuah Telaah Kritis Atas Literatur Terdahulu. *Jurnal Ekonomi, Manajemen Akuntansi Dan Perpajakan (Jemap)*, *7*(1), 24–46. https://doi.org/10.24167/jemap.v7i1.10947

Alareeni, B. A., & Hamdan, A. (2020). ESG Impact on Performance of US S&P 500-listed Firms. *Corporate Governance: The International Journal of Business in Society*, *20*(7), 1409–1428. https://doi.org/10.1108/CG-06-2020-0258

Alarussi, A. S., & Alhaderi, S. M. (2018). Factors Affecting Profitability in Malaysia. *Journal of Economic Studies*, *45*(3), 442–458. https://doi.org/10.1108/JES-05-2017-0124

Amadi, C., & Zhao, Q. (2020). Corporate Social Responsibility and Financial Performance: The Stakeholder Theory Perspective. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3919004

Badan Pusat Statistik. (2024). *Produk Domestik Bruto Atas Dasar Harga Berlaku Menurut Lapangan Usaha (miliar rupiah)*.https://www.bps.go.id/id/statistics-table/3/UzFSTVVXUlliME5XYzBZNUwwNVFRa3h6Y1d3M1p6MDkjMw==/produk-domestik-bruto-atas-dasar-harga-berlaku-menurut-lapangan-usaha----miliar-rupiah---2024.html?year=2024

Beltran, A. (2019). Female Leadership and Firm Performance. *Prague Economic Papers*, *28*(3), 363–377. https://doi.org/10.18267/j.pep.695

Broadstock, D. C., Chan, K., Cheng, L. T. W., & Wang, X. (2021). The Role of ESG performance during Times of Financial Crisis: Evidence from COVID-19 in China. *Finance Research Letters*, *38*, 101716. https://doi.org/10.1016/j.frl.2020.101716

Cahyani, R. S. A., & Puspitasari, W. (2023). Pengaruh Kinerja Lingkungan, Biaya Lingkungan, Kepemilikan Saham Publik, Green Accounting, Dan Struktur Modal Terhadap Kinerja Keuangan. *Jurnal Akuntansi Trisakti*, *10*(2), 189–208. https://doi.org/10.25105/jat.v10i2.17846

Chen, H.-M., Kuo, T.-C., & Chen, J.-L. (2022). Impacts on the ESG and Financial Performances of Companies in the Manufacturing Industry based on the Climate Change Related Risks. *Journal of Cleaner Production*, *380*, 134951. https://doi.org/10.1016/j.jclepro.2022.134951

Fatemi, A., Glaum, M., & Kaiser, S. (2018). ESG Performance and Firm Value: The Moderating Role of Disclosure. *Global Finance Journal*, *38*, 45–64. https://doi.org/10.1016/j.gfj.2017.03.001

Freeman, R. E., Dmytriyev, S. D., & Phillips, R. A. (2021). Stakeholder Theory and the Resource-Based View of the Firm. *Journal of Management*, *47*(7), 1757–1770. https://doi.org/10.1177/0149206321993576

Horne, R., & Andrade, M. C. de. (2016). Gambaran Beragam Untuk Sektor Garmen Indonesia. *Buletin Sektor Garmen Dan Alas Kaki Indonesia*, *September*, 1–17.

Intergovernmental Panel on Climate Change (IPCC). (2021). *Climate Change 2021 – The Physical Science Basis*. Cambridge University Press. https://doi.org/10.1017/9781009157896

Kementerian Lingkungan Hidup/Badan Pengendalian Lingkungan Hidup. (2025). *Peraturan Menteri Lingkungan Hidup/Badan Pengendalian Lingkungan Hidup Nomor 7 Tahun 2025 tentang Program Penilaian Peringkat Kinerja Pengelolaan Lingkungan Hidup*. https://peraturan.bpk.go.id/Details/345480/permen-lhbplh-no-7-tahun-2025

Kementrian Lingkungan Hidup dan Kehutanan. (2022). *Laporan Kinerja 2022*. https://www.kehutanan.go.id/s/uploads/LKJ_KLHK_2022_1_Mar_kecill_compressed_1_823be11b23_930223f6c5.pdf

Lee, M. T., & Raschke, R. L. (2023). Stakeholder Legitimacy in Firm Greening and Financial Performance: What about Greenwashing Temptations? *Journal of Business Research*, *155*, 113393. https://doi.org/10.1016/j.jbusres.2022.113393

Oktadewi, A. M. A., & Diantini, N. N. A. (2025). ESG and Firm Value: The Moderating role of Environmental Performance and Profitability in Indonesia's Mining Sector. *International Research Journal of Management, IT and Social Sciences*, *12*(4), 217–229. https://doi.org/10.21744/irjmis.v12n4.2536

Oktavianus, L. C., Daromes, F. E., & Asri, M. (2024). Influence of Financial Performance and Environmental Performance on Company Reputation. *AJAR*, *7*(01), 51–78. https://doi.org/10.35129/ajar.v7i01.488

Otoritas Jasa Keuangan. (2020). *Survei Nasional Literasi dan Inklusi Keuangan 2019*. https://ojk.go.id/id/berita-dan-kegiatan/publikasi/Pages/Survei-Nasional-Literasi-dan-Inklusi-Keuangan-2019.aspx

Paramita, M. D., & Prasetio, J. E. (2025). Investigating the Effect of Disclosure of Sustainability Reports, Leverage, and Company Size on Financial Performance in the Banking Sector. *International Journal of Applied Business and International Management*, *10*(2), 246–260. https://doi.org/10.32535/ijabim.v10i2.3969

Post, C., & Byron, K. (2015). Women on Boards and Firm Financial Performance: A Meta-Analysis. *Academy of Management Journal*, *58*(5), 1546–1571. https://doi.org/10.5465/amj.2013.0319

Pramisti, A. A., & Istiqomah, D. F. (2024). The Influence of Environmental Social Governance (ESG) on Company Value with Financial Performance as a Mediation Variable. *Jurnal Aplikasi Akuntansi*, *9*(1), 34–45.

https://doi.org/10.29303/jaa.v9i1.423
Putra, F. K., & Budastra, M. A. (2024). The Mediating Role of Financial Performance in Environmental, Social, and Governance (ESG) and Firm Value. *Jurnal Akuntansi Bisnis*, *17*(1), 1. https://doi.org/10.30813/jab.v17i1.4931
Rahmawati, A. A., & Chariri, A. (2024). Environmental Performance and Firm Value: Profitability as a Moderator. *MAKSIMUM*, *14*(1), 1. https://doi.org/10.26714/mki.14.1.2024.1-12
Serly, S., Susanto, A., & Fedelia, J. (2023). Pengaruh Tata Kelola Perusahaan Terhadap Kinerja Perusahaan dengan Struktur Kepemilikan sebagai Variabel Pemoderasi. *Reviu Akuntansi Dan Bisnis Indonesia*, *7*(2), 496–515. https://doi.org/10.18196/rabin.v7i2.20165
Setiani, E. P., Dewanti, P. W., & Cortez, E. (2024). ESG Scores, Financial Performance, and Carbon Emissions: Evidence from Southeast Asian Companies. *Nominal: Barometer Riset Akuntansi Dan Manajemen*, *13*(2), 227–238. https://doi.org/10.21831/nominal.v13i2.76302
Transparency International. (2023). *Corruption Perceptions index 2023*. https://www.transparency.org/en/cpi/2023
Widyawati, L. (2025). Understanding the ESG and Financial Performance Relationship: Different Metrics Matters. *Perspektif Akuntansi*, *7*(3), 298–314. https://doi.org/10.24246/persi.v7i3.p298-314
Yavuz, M. S., Tatlı, H. S., Bozkurt, G., & Öngel, G. (2025). Does ESG Performance have an Impact on Financial Performance? Evidence from Turkey. *Journal of Entrepreneurship, Management and Innovation*, *21*(1), 24–42. https://doi.org/10.7341/20252112
Zainab, A., & Burhany, D. I. (2020). Biaya Lingkungan, Kinerja Lingkungan, dan Kinerja Keuangan pada Perusahaan Manufaktur. *Prosiding 11th Industrial Research Workshop and National Seminar (IRWNS)*, *11*(1), 992–998. https://jurnal.polban.ac.id/proceeding/article/view/2153
Zhong, J., & Pei, J. (2024). Carbon Border Adjustment Mechanism: A Systematic Literature Review of the Latest Developments. *Climate Policy*, *24*(2), 228–242. https://doi.org/10.1080/14693062.2023.2190074