
The Influence of ESG Disclosure and GCG on Financial Performance of Mining Companies in Indonesia

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Abstract:

Sustainability issues are an important concern in business and investment decision-making. The mining sector has significant environmental and social impacts; the implementation of ESG and Good Corporate Governance (GCG) practices is key to realizing optimal and sustainable financial performance. This study aims to analyze the influence of Environmental, Social, and Governance (ESG) and Good Corporate Governance (GCG) disclosures on the financial performance of mining companies in Indonesia. The independent variables in this study include the ESG score from the Katadata ESG Index 2024 and GCG, which are proxied through the size of the board of directors, independent board of commissioners, and institutional ownership, with company size as a control variable. The dependent variable of financial performance is measured by Return on Equity (ROE). The underlying theories of this research include agency theory, stakeholder theory, and legitimacy theory, which explain the importance of accountability and harmonious relationships with stakeholders in driving company performance. The results of multiple linear regression on 44 mining company samples showed that only the size of the board of directors variable had a positive and significant effect on ROE partially. Meanwhile, simultaneously, all independent variables have a significant effect on ROE. These findings confirm the importance of the board structure in supporting financial performance, while other ESG and GCG influences have not had a direct individual impact.

Keywords: ESG, GCG, ROE, mining companies.

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INTRODUCTION

The world is highlighting the issue of climate change as one of the major global challenges today. Awareness in the form of concern and initiative from all stakeholders is needed for fast and accurate climate change management (Khatibi et al., 2021). The goal is to increase the capacity and competitiveness of industries that pay attention to the principles of sustainability (sustainability). Climate change is not only a responsibility borne by the government but requires synergy with business actors to run their businesses by paying attention to environmental, social, and good governance sustainability. (Sandjadirja & Rahmawati, 2023)

Sustainable development was first introduced in 1972 at the United Nations (UN) Conference on the Human Environment in Stockholm, Sweden. At the conference, the world was fully aware that the rapid development of the human population must survive in limited resources. Without good management, resources will be depleted and ultimately lead to a global crisis. The concept of sustainable development is based on the ideas of (Arif, 2021) The World Commission on Environment and Development as a development to meet the needs of the present without interfering with the fulfillment of the needs of future generations.

In 2004 the term Environmental, Social and Governance (ESG) first appeared in a report titled "Who Cares Wins: Connecting Financial Markets to a Changing World" made by United Nations Global Compact supported by International Financial Initiative and the Swiss government, believing that companies that improve environmental, social, and governance

performance will result in higher financial performance, making them worthy of being targeted for investment. (United Nation Global Compact, 2004)

One of the parties targeted by the Who Care Wins report is companies (Figure 1). Companies are required to take a leadership role by implementing environmental, social, and corporate governance principles and policies as well as information and reports on related performance in a consistent and standardized format. Companies must identify and communicate key challenges and value drivers and prioritize environmental, social, and governance issues accordingly. The report integrates ESG factors into the company's operations, breaking down the concept into three basic components namely environmental, social, and governance.



Figure 1. Key Recommendations Map for ESG Implementation
Source: *Who Cares Wins* (United Nation Global Compact, 2004)

According to The Business Case for Corporate Social Responsibility and The United Nations Global Compact Value Driver Model (United Nations Global Compact, 2013) In a similar model, there are three main ways in which sustainability through the integration of environmental, social, and governance issues can generate competitive advantages, namely risk, performance and reputation. By incorporating ESG issues into the company's sustainability framework, companies can ultimately realize cost savings through innovation, resource efficiency, and increased revenue through sustainable products and lead to improved financial performance.

ESG is a concept used by companies, investors, organizations to evaluate the performance and non-financial impact of business activities and investments. ESG is an important benchmark in investment business decision-making, as it includes 3 main aspects that greatly affect the company's long-term sustainability and relationships with stakeholders.

Bebington and Polard (2022) differentiate between ESG and sustainability through emphasis outside-in versus inside-out (sustainability). ESG is related to a company's positive impact on the environment and society, but rather an effort to protect investments by paying attention to environmental, social, and governance issues that are material to financial performance only. (Bebington & Pollard, 2022)(Bebington & Pollard, 2022)

ESG is not new to the mining industry although the term may be unfamiliar. Mining companies have long grappled with a wide range of issues related to the green agenda or sustainability, but ESG is now bringing them together in a comprehensive framework that can help mining companies navigate and balance the benefits to the planet, people, and corporate financial performance. These issues include milieu like Diversity biological, ecosystem, water management, mine waste/tailings, air, noise, energy, climate change, hazardous substances, and mine closures; social issues include human rights, land use, resettlement, vulnerable people, gender, labor practices, worker health and safety, security, traditional miners, mine

closure after land use; Meanwhile, governance issues are in the form of legal compliance, ethics, anti-bribery and corruption, and transparency.(Walker, 2022)

In the implementation of ESG in the mining sector in Indonesia, the concept of Good Mining Practice (GMP) or good mining engineering rules is known. According to the Regulation of the Minister of Energy and Mineral Resources Number 26 of 2018 concerning the Implementation of Good Mining Engineering Rules and Supervision of Mineral and Coal Mining in Article 3 paragraph 3, it is stated that good mining engineering principles include technical aspects of mining, mineral and coal conservation, mining occupational safety and health, mining operation safety, mining environmental management, reclamation, post-mining and post-operation, as well as the use of technology, engineering capabilities, design, development, and application of mining technology. In the aspect of governance, Article 29 paragraph 1 is required to implement openness, accountability, responsibility, independence, and fairness. Meanwhile, the seventh part of the Ministerial Regulation is about the Development and Empowerment of Local Communities and Social and Environmental Responsibility.

Implementation ESG in Indonesia has made significant progress. Based on data from BGK Foundation, the average value of ESG in the Indonesian capital market increased from 30% in 2021 to 46% in 2023. Meanwhile, the mining sector showed a higher surge, from 36% to 63.78% in the same period. (Maulidin, 2024)ESG progress in the mining sector is reflected in: Increasing Official sustainability report and Tracking System For the governance aspect, pEmissions Reduction through the adoption of renewable energy and operational efficiency, pengakuan formal through PROPER certification, pRegulative Proximity with instruments carbon market and taxonomy green finance, as well as the upgrading of ESG Corporate Culture and comprehensive implementation remains a challenge.

The Financial Services Authority (OJK) as a supervisory institution in the financial services sector encourages the development of the green economy through the implementation of the Sustainable Finance Roadmap Phase I and II which requires financial services institutions, issuers, and public companies to submit sustainability reports.(Otoritas Jasa Keuangan, 2021)

Many studies on ESG have been conducted. Wan, Dawod, Chanaim, & Ramasamy (2023) conducted a publication analysis of 755 scientific journals published from 2004 to 2021 according to Figure 1.4 to show the trend of ESG research developments. The results of the study summarize the current situation and development trends in the field of research and provide direction and ideas for future research. The results of the study show that the studies are increasingly focusing on the influence of behaviour ESG on risk, cost of capital, performance, and value of the company. Most of the research is known to have originated in the United States and Europe.(Wan, Dawod, Chanaim, & Ramasamy, 2023).

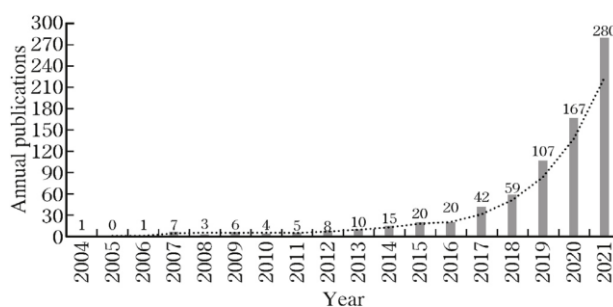


Figure 2. Scientific Journal Publications 2004-2021

Source: (Wan, Dawod, Chanaim, & Ramasamy, 2023)

Research and publications discussing the relationship between ESG performance and financial performance have been widely published. Friede, Busch, and Bassen examined about 2200 studies from 1978 to 2015 and found a positive correlation (Figure 1). In 2021, Whelan, Atz, and Clark (2021) conducted a similar study of more than 1,000 scientific publications on the relationship between ESG performance and financial performance published in 2015 to 2020 showing that most of the effects were positive (Figure 2

In the report titled *From the Stockholder to the Stakeholders* (Clark, Feiner, & Viehs, 2015) mentioning three advantages of companies implementing ESG, namely risk mitigation, improving performance, and company reputation. These three advantages are based on a simplified model and The United Nations Global Compact Value Driver Model (United Nations Global Compact, 2013). Whether the advantage is true as an influence ESG disclosures in Indonesia, especially the performance of companies in the mining sector.

Based on previous studies (Friede, Busch, & Bassen, 2015)(Whelan, Atz, & Clark, 2021) shows most of the The results of the study show that the influence of ESG disclosure on financial performance has Positive relationships. This means that the better the ESG performance will improve the company's financial performance, but some studies also showing a negative relationship between the two variabel aforementioned. Means ESG disclosure does not always improve company performance, so it needs to be further researched, especially in the context of mining companies in Indonesia that have high environmental and social risks.

In addition, the implementation of Good Corporate Governance is an important part of company management in order to realize the company's goals, especially mining companies in Indonesia. The mining industry has a significant contribution to Indonesia's Gross Domestic Product (GDP), export income, and labor absorption. However, the sector also faces many challenges such as fluctuations in mining commodity prices, environmental issues, social conflicts, and legal uncertainty. Effective GCG implementation is crucial to ensure that mining companies can manage these risks and achieve optimal financial performance.

GCG includes a board of directors, an independent board of commissioners, managerial ownership, institutional ownership and an audit committee designed to ensure transparency, accountability, and effective decision-making within the company. The good implementation of GCG is believed to increase investor confidence, reduce operational risks, and ultimately affect the company's financial performance.

Several studies related to the influence of GCG on company performance have been conducted with various measurement indicators. Core internal control mechanisms that have been used to control top management activities with the aim of protecting the interests of shareholders and . (Alabdullah & Ahmed, *Corporate Governance: To What Extent it is Important in the Arab Countries?*, 2018) (Alabdullah, Ahmed, & Ramyar, *Organization Features and Profitability: Implications for a Sample of Emerging Countries*, 2021) Research in Indonesia, states that independent commissioners have a positive effect on company value. However, other research and , stated that independent commissioners have no effect on a company's performance. Result (Ramadhani & Sulistyowati, 2021)(Pratiwi & Noegroho, 2022)(Budiharjo, 2021) research on the variable ownership of diverse institutions (Budiharjo, 2021)(Dewi, Rustiarini, & Dewi, 2022), institutional ownership has no significant effect on financial performance, whereas research shows a positive relationship between institutional ownership and financial performance.(Amrizal & Rohmah, 2017)

Companies in Indonesia are interesting to study further because Indonesia has abundant mineral and coal resources so that mining activities with deforestation and land excavation are largely unavoidable, causing environmental impacts, social conflicts, and legal and governance problems. The results of previous research also do not show absolute results. Therefore, the researcher tried to find an answer to this question by conducting a study entitled "The Influence of ESG and GCG Disclosure on the Financial Performance of Mining Companies in

Indonesia". The ESG variable is an ESG disclosure index while GCG is proxied on the variables of the size of the board of directors, independent board of commissioners, and institutional ownership with company size as the control variable and its effect on dependent variables in the form of financial performance proxied as Return on Equity (ROE) is examined.

The results of the research can provide many benefits to various stakeholders. For the company's management to pay attention to the significance of the implementation of ESG and GCG in achieving the company's goals, enriching the literature and empirical studies related to ESG and GCG in Indonesia in particular, as a consideration for investors and financial institutions in assessing the company's prospects and sustainability.

The purpose of the study is to find out the effect of ESG disclosure on financial performance, as well as the influence of the size of the board of directors, the size of independent commissioners, and institutional ownership on the financial performance of mining companies in Indonesia. The benefit of the results of this study is to enrich academic studies on the influence of ESG and GCG performance on financial performance, especially in the mining sector in Indonesia, as well as to be the basis for further research that wants to explore other factors that affect the performance of companies in different sectors. This research also provides insight for companies in making sustainability-based decisions, as well as being the basis for investment decision-making that pays more attention to ESG and GCG for investors. In addition, financial institutions or creditors can use the results of this research for funding policies that take more into account ESG and GCG aspects.

RESEARCH METHOD

This study aimed to determine the influence of ESG and GCG disclosure on the financial performance of mining companies in Indonesia. ESG disclosure was based on the Katadata ESG Index 2024 report, which used companies' 2023 sustainability reports listed on the Indonesia Stock Exchange. GCG was proxied by the size of the board of directors, independent commissioners, and institutional ownership. The research period was from April 1, 2025, to June 30, 2025. The study examined whether there was a significant relationship between ESG and GCG disclosure and the financial performance of mining companies in Indonesia.

This research was associative explanatory, formulating hypotheses to test the relationships between variables. A quantitative method was used, collecting numerical data to analyze hypotheses and relationships statistically. Multiple regression showed correlations among variables without establishing causality but indicating associations. The independent variables were ESG disclosure and Good Corporate Governance aspects, including board size, independent commissioners, and institutional ownership. Company size was used as a control variable, and financial performance was measured by Return on Equity (ROE) as the dependent variable. The study used secondary data, which were obtained from sources collected by others through various commercial and non-commercial methods.

RESULTS AND DISCUSSION

Data Analysis

Outliers Analysis

In this study, outlier data was identified based on the Studentized Residual (SRE) value which significantly deviated from the distribution of the majority data in the range of -2 to 2. Based on the identification results, three companies are outside this range, namely PT Bumi Resources Tbk with an SRE value of -2.45, PT Golden Energy Mines Tbk with an SRE value of 2.80, and PT SMR Utama Tbk with an SRE value of 3.51.

Therefore, the three companies were removed from the data analysis to maintain the validity and reliability of the analysis results, considering that these values did not reflect the general characteristics of the population of the mining companies studied and distorted the

estimated parameters of the model model in the F test to be insignificant. This led to the number of samples used to 44 (forty-four) samples. Figure 3 shows the position of the SRE values of each sample.

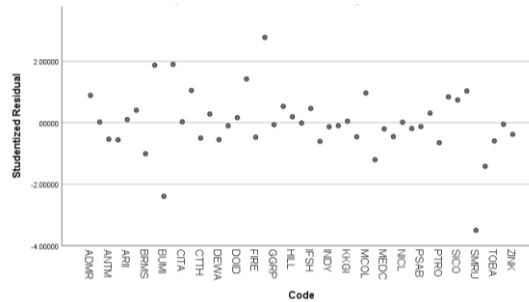


Figure 3. Scatter Plot Code Company with Studentized Residual
Source: Processed Data (2025)

Descriptive Statistical Analysis

Based on the results of descriptive statistics in Table 4.3, it shows that all variables in this study consist of 44 observations. The ESG variable has an average value of 45.5873 with a standard deviation of 19.1720, indicating a fairly high variation in the level of ESG disclosure between companies, with a minimum value of 5.13 and a maximum of 70.78. The average number of board of directors (BOD) is 4.6136 people, with a spread between 2 to 12 people, showing the difference in the board structure in the sample company. The number of independent commissioners (INDPs) has an average value of 1.8864 people, with a minimum value of 0 and a maximum of 4, as well as a standard deviation of 0.8948, reflecting moderate variations in the implementation of the independence of the board. Meanwhile, institutional ownership (IO) showed an average value of 0.7220, indicating that most of the companies are institutionalized, with a relatively low spread (standard deviation of 0.2743). Company size (SIZE), measured by the natural logarithm of total assets, has an average of 29.5968, with a standard deviation of 1.7364. Financial performance measured through ROE showed an average value of 0.1466 or 14.66%, with a value range from -0.07 to 0.67, and a standard deviation of 0.1730. These values show considerable variability in profitability between firms in the research sample

From the values of skewness and kurtosis, it can be concluded that the majority of variables have a distribution that is close to normal, since the values of skewness and kurtosis are in the range of ± 2 . This supports the validity of the normality assumption in multiple linear regression tests.

Table 1. Descriptive Statistics

Variable	N	Range	Minimum	Maximum	Mean	Std. Error	Std. Deviation	Variance	Skewness	Std. Error (Skewness)	Kurtosis	Std. Error (Kurtosis)
ESG	44	65.65	5.13	70.78	45.5873	2.89029	19.17199	367.565	-0.928	0.357	-0.121	0.702
BOD	44	10.00	2.00	12.00	4.6136	0.31052	2.05976	4.243	1.419	0.357	2.797	0.702
INDP	44	4.00	0.00	4.00	1.8864	0.13490	0.89484	0.801	0.027	0.357	-0.357	0.702
IO	44	0.94	0.06	1.00	0.7220	0.04136	0.27433	0.075	-1.190	0.357	0.314	0.702
SIZE	44	7.07	25.65	32.72	29.5968	0.26178	1.73642	3.015	-0.358	0.357	-0.662	0.702
ROE	44	0.74	-0.07	0.67	0.1466	0.02608	0.17298	0.030	1.450	0.357	2.053	0.702
Valid N (listwise)	44	—	—	—	—	—	—	—	—	—	—	—

Source: Processed Data (2025)

Classic Assumption Test

Before multiple linear regression analysis is carried out, a test of classical assumptions is first carried out to ensure that the regression model is unbiased. The classical assumption test was carried out to detect violations of the basic conditions of regression, namely: linearity,

residual normality, multicollinearity between independent variables, and heteroscedasticity. The fulfillment of this assumption is important so that the results of the regression coefficient estimation can be interpreted validly and unbiasedly. The following are presented the results of each classical assumption test carried out on research data

Linearity Test

The linearity test is performed to ensure that the relationship between each independent variable and the dependent variable (ROE) is linear, as required in a linear regression model. Linear relationships are an important prerequisite for the estimation of regression coefficients to reflect the actual relationship and for the results of the analysis to be valid.

One of the methods used to see the linear relationship between variables is to bi-plotting or partial plotting of each independent variable with its dependent variable.

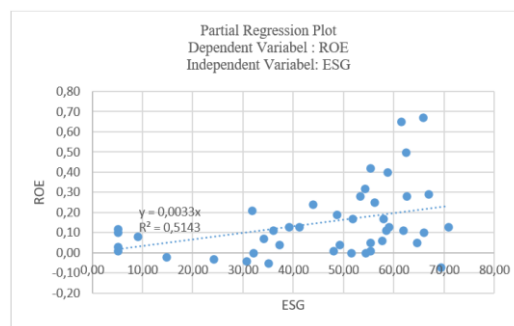


Figure 3. Linearity Test of ESG Disclosure on ROE
Source: Processed Data (2025)

Figure 3 shows a partial regression plot between the ESG disclosure variables and the Return on Equity (ROE) to test whether the relationship between the two is linear. Based on the graph, it can be seen that the distribution of data points follows the direction of a linear regression line that forms an ascending (positive) pattern, albeit with a fairly high dispersion rate.

An R^2 value of 0.1574 indicates that approximately 15.74% of the variation in ROE can be explained by variations in ESG disclosures, with the rest explained by other factors outside of this model. Although the R^2 value is not high, the regression pattern and the direction of the positive relationship indicate an indication of linearity between ESG and ROE.

Thus, based on the graph and the R^2 value, the relationship between ESG and ROE can be considered linear, and meet one of the requirements in multiple linear regression analysis.

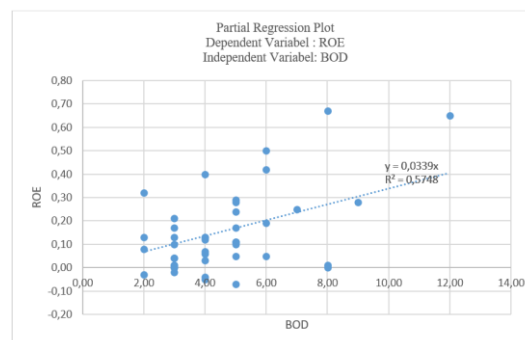


Figure 4. Linearity Test of Board of Directors Size on ROE
Source: Processed Data (2025)

Figure 4 presents the results of the partial regression plot between the size of the Board of Directors (BOD) and the Return on Equity (ROE). The regression line shows the tendency of the relationship to be positive and linear.

An R^2 value of 0.2623 indicates that approximately 26.23% of the ROE variation can be explained by the variation in the size of the board of directors. This is a relatively stronger R^2 value compared to the ESG relationship with ROE, which indicates that the size of the board of directors has a significant influence on a company's financial performance, although it does not account for all the variations.

The distribution of data points following the direction of the linear trend line reinforces the indication that the relationship between BOD and ROE is linear, and thus satisfies the linearity assumption in multiple linear regression models. The positive direction of the trend line also indicates that the larger the size of the board of directors, tends to correlate with an increase in ROE.

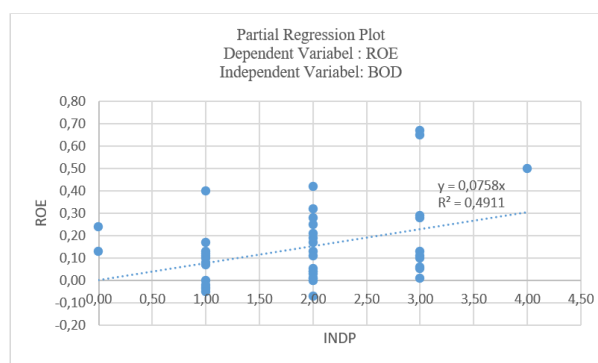


Figure 5. Linearity Test of Independent Commissioner Size to ROE
Source: Processed Data (2025)

Figure 5 shows the partial regression plot between the size of independent commissioners (INDP) and Return on Equity (ROE). The results showed a positive relationship and a partial determination coefficient (R^2) of 0.1171. This indicates that about 11.71% of the ROE variation can be explained by the INDP after controlling for other variables. Although the contribution is relatively low, these findings support the role of independent commissioners in improving the financial performance of companies.

Thus, based on the visualization and the value of the determination coefficient, it can be concluded that the relationship between institutional ownership and ROE is linear. This shows that INDP meets the assumption of linearity as one of the conditions in multiple linear regression.

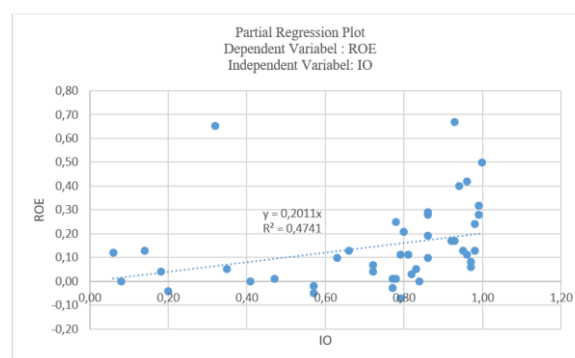


Figure 6. Institutional Ownership Linearity Test on ROE
Source: Processed Data (2025)

Figure 6 shows the partial regression plot between the proportion of institutional ownership (IO) and Return on Equity (ROE). Based on the graph, there is a positive linear relationship between the two variables, as shown by the direction of the ascending regression line.

This R^2 value suggests that about 8.76% of the variation in ROE can be explained by variations in the proportion of institutional ownership, while the rest is explained by other factors. The pattern of data dissemination that tends to follow the direction of the trend line gives an indication that the relationship between IO and ROE is linear.

Thus, based on the visualization and the value of the determination coefficient, it can be concluded that the relationship between institutional ownership and ROE is linear. This shows that IO meets the assumption of linearity as one of the conditions in multiple linear regression.

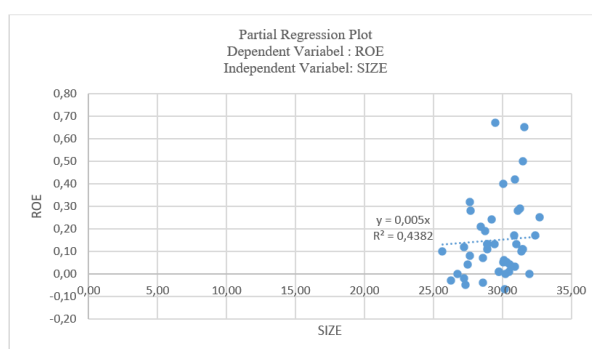


Figure 7. Linearity Test of Company Size on ROE
Source: Processed Data (2025)

Figure 7 shows the results of a partial regression plot between the company size variable (SIZE), which is measured by the natural logarithm of total assets, and the Return on Equity (ROE). The regression line shows a very sloping slope in a positive direction, with a regression equation.

The R^2 value suggests that only about 2.54% of the ROE variation can be explained by the size of the company in this model. This figure is very low, which indicates that company size does not have a strong relationship to ROE in a linear manner.

Although the direction of the linear trendline remains positive, the distribution of data points is very dense and does not show a strong correlation pattern. Thus, it can be concluded that the relationship between SIZE and ROE is linear but very weak, and its contribution to partial variation of ROE is also limited.

Residual Normality Test

Figure 8 shows a histogram of standardized residuals to test whether the residual data in the regression model follow the normal distribution. The black curve shows the shape of the theoretical normal curve used as a comparison to the actual distribution of the residual data.

Based on the drawing, the residual distribution forms a bell-shaped curve that is quite symmetrical around the zero value, and there are no extreme outliers that deviate far from the distribution. The residual mean value is $-6.65E-16$, and the standard deviation is 0.940, which also indicates a reasonable and proportional residual distribution.

Taking into account the visual shape of the histogram that resembles the normal distribution as well as the supporting statistical values, it can be concluded that the residual normality assumption in the regression model has been met. The fulfillment of this assumption is important because it is a basic requirement in classical linear regression analysis so that the estimation of the regression coefficient is valid and unbiased.

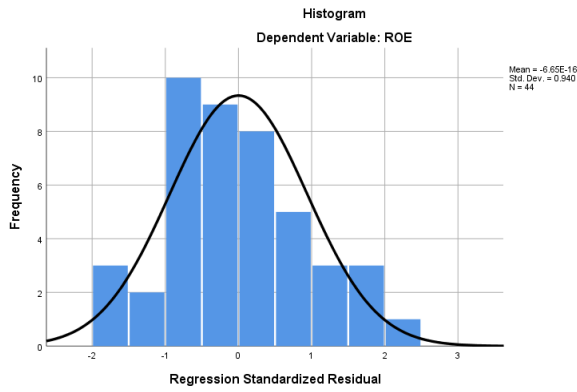


Figure 8. Residual Normal Test

Source: Processed Data (2025)

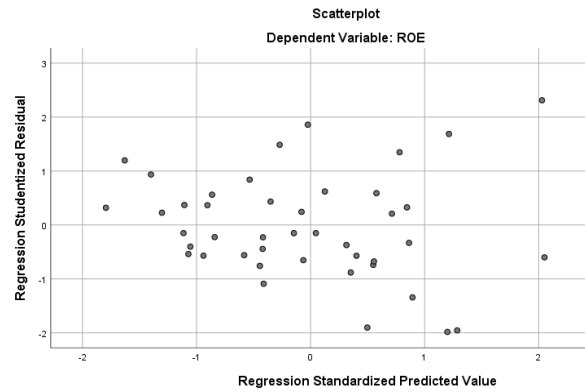


Figure 9. Normal Graph P-P Standardized Residual Regression Plot

Source: Processed Data (2025)

Figure 9 shows a Normal Probability Plot (P–P Plot) graph of standardized residuals to test the residual normality assumptions in regression models. In this graph, the horizontal axis shows the observed cumulative probability, while the vertical axis shows the expected cumulative probability based on the normal distribution.

The results show that the residual points tend to follow a diagonal line, which is a theoretical normal line. The pattern shows that the residual distribution is quite close to the normal distribution, as there are no systematic deviations or extreme deviations from the line.

Thus, based on this P–P Plot, it can be concluded that the residual normality assumption is met, so that the multiple linear regression model used in the study can be said to be valid in terms of its error distribution. This supports the residual histogram results which previously also showed a distribution pattern close to normal.

Multicollinearity Test

Table 4.4 shows the results of the multicollinearity test used to determine whether there is a high correlation relationship between independent variables in the regression model. This test was carried out by looking at the Tolerance and Variance Inflation Factor (VIF) values for each independent variable.

In general, the criteria used to detect multicollinearity are:

- a) A Tolerance value of < 0.10 indicates an indication of multicollinearity,
- b) The VIF value > 10 indicates a serious multicollinearity problem.

Table 2. Multicollinearity Test Results

Model	Variable	Collinearity Statistics	
		Tolerance	VIF
1	(Constant)	–	–
	ESG	0.623	1.605
	BOD	0.671	1.489
	INDP	0.654	1.530
	IO	0.893	1.120
	SIZE	0.576	1.735

Source: Processed Data (2025)

Based on the table, all variables have a Tolerance value above 0.10 and a VIF below 10. Thus, it can be concluded that there are no symptoms of multicollinearity between independent variables in the model. This shows that each independent variable has an independent contribution to the dependent variable (ROE), and the regression model can be used further without the risk of distortion due to the high correlation between the predictors.

Heterokedasticity Test

Figure 10 shows the results of the heteroscedasticity test using the scatterplot method between the studentized residual value and the standardized predicted value from the regression model with the dependent variable Return on Equity (ROE).

Based on the scatterplot, the residual points are randomly scattered around the zero horizontal line and do not form a certain systematic pattern, such as a widening or narrowing spread pattern (fan shape). This suggests that residual variance tends to be constant over the entire range of predictive values, which is an indication of the absence of heteroscedasticity symptoms in the regression model used.

Thus, it can be concluded that the regression model has fulfilled the assumption of homoskedasticity, which means that the regression model is unbiased, at least in terms of assumptions related to constant error variance.

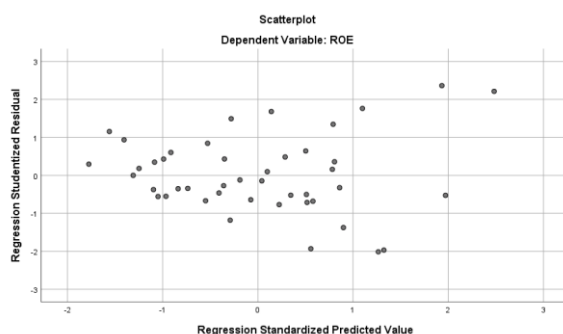


Figure 10. Heteroscedasticity Test Results

Source: Processed Data (2025)

Hypothesis Testing

After all the classical assumptions in multiple linear regression are fulfilled, the next stage is to test the research hypothesis. The hypothesis test was carried out to determine whether independent variables consisting of ESG disclosures, the size of the board of directors, the proportion of independent commissioners, institutional ownership, and company size had a partial or simultaneous influence on the company's financial performance as measured by Return on Equity (ROE). The test was carried out using the t-test (partial) to test each independent variable individually, and the F-test (simultaneous) to test the influence of the five variables together. The results of this test are the basis for determining whether the hypothesis proposed in this study can be accepted or rejected. Table 2 is the result of multiple linear regression using the SPSS 26 application.

Table 3. Multiple Linear Regression Results

Model	Variable	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig.
1	(Constant)	0.196	0.453	—	0.433	0.668
	ESG	0.001	0.001	0.161	0.986	0.330
	BOD	0.040	0.013	0.473	3.005	0.005
	INDP	0.019	0.031	0.100	0.625	0.536
	IO	0.122	0.086	0.193	1.416	0.165
	SIZE	-0.014	0.017	-0.144	-	0.403
					0.845	

Source: Processed Data (2025)

Multiple Linear Regression Equations

Based on Table 3, the regression model is obtained as follows:

$$ROE = 0.196 + 0.001 \text{ ESG} + 0.04 \text{ BOD} + 0.019 \text{ INDP} + 0.122 \text{ IO} - 0.014 \text{ SIZE} + e$$

Based on the regression equation, it can be interpreted as follows:

- a. Intercept (Constant) of 0.196: If all independent variables are zero, then the ROE value is estimated to be 0.196 or 19.6%.
- b. ESG (Environmental, Social, Governance) coefficient of 0.001: ESG Disclosure Variable has a positive influence on ROE. Each change in the ESG index contributes to an increase in ROE of 0.1%.
- c. BOD coefficient (board size) of 0.040: The size of the board of directors has a positive influence on ROE. Each additional one member of the board of directors is associated with an increase in ROE of 4%.
- d. INDP coefficient (independent commissioner size) of 0.019: The size of independent commissioners has a positive effect on ROE. Each additional one member of the independent board of commissioners can increase ROE by 1.9%.
- e. IO (institutional ownership) coefficient of 0.122: Institutional Ownership has a positive influence on ROE. Every additional one percent of institutional ownership is associated with a 12.2% increase in ROE.
- f. The SIZE coefficient (Company Size) of -0.014: ESG Disclosure variables have a negative influence on ROE. Each change in Asset Value of one unit contributes to a reduction in ROE of 1.4%.

Coefficient Determination Analysis

Table 4 shows that the regression model produces a determination coefficient value (R Square) of 0.367, meaning that about 36.7% of the variation in ROE (Return on Equity) can be explained by independent variables in the model, namely: ESG, BOD, INDP, IO, and SIZE. This value indicates that the model has a moderate ability to explain changes in ROE.

The Adjusted R Square value of 0.284 shows that after adjusting for the number of predictor variables in the model, the contribution of the model explanation to the dependent variable is 28.4%. This adjustment is important to avoid bias due to the number of independent variables used.

An R-value (multiple correlation) of 0.606 indicates that there is a fairly strong correlation between ROE and the combination of all independent variables in the model.

Table 4. Determination Coefficient Analysis Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.606	0.367	0.284	0.14635

Predictors: (Constant), SIZE, IO, INDP, BOD, ESG

Dependent Variable: ROE

Source: Processed Data (2025)

F Test (Simultaneous Signification Test)

Based on the results of the ANOVA test, an F value of 4.413 was obtained with a significance value of 0.003. This shows that the regression model was simultaneously significant at a 95% confidence level. Thus, the ESG, BOD, INDP, IO, and SIZE variables together affect ROE. These findings support the validity of the model in explaining the company's financial performance through the company's ESG and GCG approaches.

Table 5. Determination Coefficient Analysis Results

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	0.473	5	0.095	4.413	0.003
Residual	0.814	38	0.021	—	—
Total	1.287	43	—	—	—

Source: Processed Data (2025)

T Test (Partial Significance Test)

Based on the results of the t-test in Table 5, it is known that only one of the five independent variables has a significant influence on Return on Equity (ROE), namely the board of directors (BOD) size variable, while the other four variables, namely ESG disclosure, independent commissioner size (INDP), institutional ownership (IO), and company size (SIZE) do not show a significant influence.

The BOD variable has a coefficient value of 0.040 with a significance value of 0.005 ($p < 0.05$), which shows that partially BOD has a positive and significant effect on ROE. This indicates that the increase in the number of board members contributes to increasing the company's profitability, which can be interpreted as a reflection of the effectiveness of strategic management and decision-making.

In contrast, the ESG variable had a significance value of 0.330, indicating that disclosure of environmental, social, and governance practices had no significant effect on ROE in this model. The same is true for the variables INDP (Sig. = 0.536), IO (Sig. = 0.165), and SIZE (Sig. = 0.403), all of which have significance values above 0.05. Thus, partially, these four variables do not contribute statistically to explaining the variability of the company's ROE.

Influence of Independent Variables on Dependent Variables

The Effect of ESG Disclosure on Financial Performance

The regression results showed that the ESG coefficient was 0.001 with a significance value of 0.330, indicating that ESG disclosure had no partial significant effect on Return on Equity (ROE). This is in contrast to several previous studies that have found a positive relationship between ESG and financial performance (Whelan et al., 2021; Triyani et al., 2020). However, the insignificance of ESG in this study may be due to the suboptimal quality and depth of ESG implementation in Indonesia's mining sector, or because ESG has more long-term impact than can be captured by annual financial measurements such as ROE.

The Effect of the Size of the Board of Directors on Financial Performance

The BOD variable shows a coefficient of 0.040 with a significance value of 0.005, which means that it has a positive and significant effect on ROE. These results are consistent with the agency theory that the board of directors plays an important role in the supervision and strategic decision-making of the company. The larger the number of board of directors, the more diverse the expertise and experience that can support increasing managerial effectiveness and achieving the company's financial performance.

The Effect of the Size of Independent Commissioners on Financial Performance

The independent commissioner measure (INDP) showed a positive coefficient of 0.019 but was not statistically significant ($p = 0.536$). These results show that the existence of independent commissioners has not been able to have a meaningful influence on the company's ROE. This may be due to a suboptimal supervisory function or active involvement in strategic decision-making. This result is in line with the findings of Pratiwi & Noegroho (2022) and Budiharjo (2021) who stated that independent commissioners do not have a significant effect on company performance.

The Influence of Institutional Ownership on Financial Performance

Institutional ownership (IO) has a coefficient of -0.122 with a significance value of 0.165, suggesting that its effect on ROE is insignificant. Although theoretically institutional investors can play the role of active supervisors, in this context such a role does not seem to

have been effectively realized. This may happen because some institutions are passive or just follow market trends without making strategic interventions to management.

The Influence of Company Size on Financial Performance

The SIZE control variable had a coefficient of -0.014 and was insignificant ($p = 0.403$), suggesting that the size of the firm did not significantly affect ROE in this model. While larger companies tend to have greater access to resources, they also face complex managerial and operational challenges, which can offset potential performance improvements.

Simultaneous Influence of Independent Variables on Financial Performance

The F test showed that the regression model was simultaneously significant ($F = 4.413$; Sig. = 0.003), meaning that ESG, BOD, INDP, IO, and SIZE together had an effect on ROE. An R-Square value of 0.367 indicates that 36.7% of the variation in ROE can be explained by all five variables in the model, while the rest is influenced by other factors outside the model

Discussion of Research Results with Theories Used

There are three main theories used in this study, namely agency theory, stakeholder theory, and legitimacy theory.

Agency Theory

Agency theory emphasizing the importance of supervisory mechanisms to reduce conflicts of interest between management (agents) and company owners (principals). In this context, the finding that the size of the board of directors (BOD) has a positive and significant effect on ROE supports the theoretical view of the agency, in which the board of directors acts as an effective internal control mechanism. With the increase in the number of directors, supervision of the company's resource management has become stricter, so that financial performance can be improved.

However, the insignificance of independent commissioners and institutional ownership of ROE suggests that not all governance mechanisms deliver the expected results. This may be due to the weak supervisory role of independent commissioners or the passive attitude of institutional investors in Indonesian mining companies, which means that the supervisory function within the theoretical framework of the agency has not been optimal.

Stakeholder Theory

Stakeholder theory emphasizes the importance of paying attention to the interests of all stakeholders, including through transparency and sustainability practices such as ESG. However, the results show that ESG disclosure has no significant effect on ROE. These findings are in contrast to the expectations of stakeholder theories that attention to social and environmental issues can improve reputations and support financial performance.

The possible cause is that the ESG disclosure carried out by the company is not substantial enough or has not been the main consideration for stakeholders in assessing the company's performance. ESG may have more long-term impact, while ROE as an annual measure has not fully captured the impact.

Legitimacy Theory

Legitimacy theory states that companies must operate within the boundaries of social values and norms in order to still receive support from the community and the surrounding environment. ESG disclosure, in this context, serves to gain social legitimacy and reduce the legitimacy gap.

However, the results of the study show that the influence of ESG on ROE is insignificant, it can be interpreted that the social legitimacy obtained through ESG has not

directly contributed to the increase in short-term profitability. While ESG can improve reputation, the transformation process may not yet be directly reflected in financial measures such as ROE.

Synthesis Theoretis

Overall, the findings of this study are more aligned with agency theory, especially through the significant role of the board of directors in improving financial performance. Meanwhile, stakeholder theory and legitimacy theory, although conceptually relevant, have not been fully supported empirically in this study because ESG variables do not have a significant effect on ROE. This opens up space for further assessment of the quality of ESG disclosure and the time frame for measuring its impact on financial performance.

These findings show that from the perspective of corporate ESG and GCG disclosure and company characteristics, the structure of the board of directors was the most relevant factor in influencing the financial performance of the mining companies studied, while ESG factors, board independence, institutional ownership, and company size did not have a significant influence directly on profitability

CONCLUSION

This study found that ESG disclosure did not significantly affect the financial performance (ROE) of mining companies, indicating no direct impact on short-term profitability. However, the size of the board of directors positively influenced ROE, supporting agency theory that a larger board can enhance financial outcomes. Independent commissioners, institutional ownership, and company size showed no significant effects. Together, these variables explained 36.7% of the variation in ROE. The results suggest mining companies should focus on board composition to improve financial performance while continuing to enhance ESG disclosures as a long-term strategy to build reputation and attract investors. Future research could explore the long-term effects of ESG disclosure on financial performance and investigate other governance factors that may influence profitability.

REFERENCES

- Alabdullah, T. T., & Ahmed, E. R. (2018, November). Corporate Governance: To What Extent it is Important in the Arab Countries? *International Journal of Science and Research (IJSR)*, 7(11), 1174-1176. doi:<https://www.doi.org/10.21275/ART20192964>
- Alabdullah, T. T., Ahmed, E. R., & Jebna, A. K. (2022, May 30). Corporate Governance System and Firm Financial Performance. *Acta Scientific COMPUTER SCIENCES*, 4(6), 97-103. Retrieved from https://www.researchgate.net/publication/361029270_Corporate_Governance_System_and_Firm_Financial_Performance
- Alabdullah, T. T., Ahmed, E. R., & Ramyar, R. A. (2021, March). Organization Features and Profitability: Implications for a Sample of Emerging Countries. *Journal of Accounting and Business Education*, 5(2), 43-51. doi: <http://dx.doi.org/10.26675/jabe.v5i2.16351>
- Amrizal, & Rohmah, S. H. (2017). The Influence of Institutional Ownership, Independent Board of Commissioners, Audit Committee and Audit Quality on Company Value. *The Role of the Accounting Profession in Combating Corruption*, (pp. 76-89). Retrieved from <https://publikasiilmiah.ums.ac.id/xmlui/bitstream/handle/11617/9217/7.%20Amrizal.pdf?sequence=1&isAllowed=y>
- Arif, I. (2021). *Good Mining Practices in Indonesia*. Jakarta: PT Gramedia Pustaka Utama.

- Bebbington, J., & Pollard, D. (2022, March 24). *Pentland: Lancaster University*. Retrieved April 15, 2025, from Lancaster University Web Site: <https://www.lancaster.ac.uk/pentland/news-and-events/blog/esg-and-sustainability-different-but-related-ideas>
- Budiharjo, R. (2021). The Effect Of Good Corporate Governance And Leverage Toward Company Value With Profitability As A Moderating Variable. *International Journal of Management Studies and Social Science Research*, 3(3). Retrieved from <https://www.ijmsssr.org/paper/IJMSSSR00421.pdf>
- Clark, G. L., Feiner, A., & Viehs, M. (2021). *From the Stockholder to the Stakeholder: How Sustainability can Drive Financial Outperformance*. Oxford: University of Oxford dan Arabesque Partners. Retrieved from https://arabesque.com/research/From_the_stockholder_to_the_stakeholder_web.pdf
- Dewi, A. S., Rustiarini, N. W., & Dewi, N. P. (2022, July 16). The Influence of Institutional Ownership, Independent Commissioners, Audit Committee and Audit Quality on the Integrity of Financial Statements. *Journal of Accounting Student Research Results (Kharisma)*. Retrieved from <https://e-journal.unmas.ac.id/index.php/kharisma/article/view/4579>
- Khatibi, F. S., Dedekorkut-Howes, A., Howes, M., & Torabi, E. (2021). Can public awareness, knowledge and engagement improve climate change adaptation policies? *Discover Sustainability*, 2(1), 18.
- Maulidin, M. A. (2024, December 4). *Environment: Isafety Magazine*. Retrieved April 15, 2025, from Magazine Isafety Web Site: <https://isafetymagazine.com/nilai-esg-sektor-pertambangan-dicapai-63-persen-lebih-tahun-lalu/>
- Financial Services Authority. (2021). *Sustainable Finance Roadmap Phase II (2021-2025)*. Jakarta: Financial Services Authority.
- Pratiwi, V. A., & Noegroho, Y. A. (2022, May). The Influence of the Board of Commissioners, Independent Commissioners, and Managerial Ownership on the Company's Financial Performance during the Covid-19 Period. *Journal of Accounting Sciences*, 23(1), 7-16. Retrieved from <https://scholar.archive.org/work/2ri66x2nozcmxksylir7o5ynla/access/wayback/https://t-ema.ub.ac.id/index.php/tema/article/download/646/234>
- Ramadhani, A. P., & Sulistyowati, E. (2021, June 23). The Influence of Good Corporate Governance and Financial Performance on Company Value. *Journal of Accounting Science and Research*, 10(3). Retrieved from <https://jurnalmahasiswa.stiesia.ac.id/index.php/jira/article/view/3828>
- Sandjadirja, L. M., & Rahmawati, L. (2023). *Summary Report Katadata Corporate Sustainability Index*. Jakarta: Katadata Insight Center.
- Triyani, A., Setyahuni, S. W., & Kiryanto. (2020). The Effect Of Environmental, Social and Governance (ESG) Disclosure on Firm Performance: The Role of Ceo Tenure. *Jurnal Reviu Akuntansi dan Keuangan*, 10(2), 261-270. doi:<https://doi.org/10.22219/jrak.v10i2.11820>

- Walker, D. (2022, May 12). *Content Hub: SLR*. Retrieved from SLR Web Site: <https://www.slrconsulting.com/apac/insights/esg-insights-what-does-esg-mean-for-the-mining-industry/>
- Wan, G., Dawod, A. Y., Chanaim, S., & Ramasamy, S. S. (2023, March 16). Hotspots and Trends of Environmental, Social and Governance (ESG) Research: a Bibliometric Analysis. *Data Science and Management*, 6(2), 65-75. doi:<https://doi.org/10.1016/j.dsm.2023.03.001>
- Whelan, T., Atz, U., & Clark, C. (2021). *ESG and Financial Performance: Uncovering the Relationship by Aggregating Evidence from 1,000 Plus Studies Published between 2015-2020*. NYU Stern Center for Sustainable Business and Rockefeller Asset Management. Retrieved from <https://www.stern.nyu.edu/sites/default/files/assets/documents/ESG%20Paper%20Aug%202021.pdf>
- Zhan, S. (2023, May 29). ESG and Corporate Performance: A Review. *SHS Web Confrences: 4th International Symposium on Frontiers of Economics and Management Science (FEMS 2023)*, 169, pp. 1-4. Shanghai. doi:<https://doi.org/10.1051/shsconf/202316901064>