

---

**EMPIRICAL STUDY OF ENVIRONMENTAL, SOCIAL & GOVERNANCE (ESG)  
ON THE STOCK RETURNS OF MINING COMPANIES WITH PROFITABILITY  
AS AN INTERVENING VARIABLE LISTED ON THE INDONESIA STOCK  
EXCHANGE FOR THE PERIOD 2018-2023?**



**Ardhiati Octaviani<sup>1</sup>**  
Universitas Pakuan, Bogor, Indonesia  
[ardhiatioctaviani@gmail.com](mailto:ardhiatioctaviani@gmail.com)

**Hari Gursida<sup>2</sup>**  
Universitas Pakuan, Bogor, Indonesia  
[hg.gursida@unpak.ac.id](mailto:hg.gursida@unpak.ac.id)

**Yohanes Indrayono<sup>3</sup>**  
Universitas Pakuan, Bogor, Indonesia  
[yindrayono@unpak.ac.id](mailto:yindrayono@unpak.ac.id)

---

**Abstract**

This study aims to examine the influence of ESG on the stock returns of mining companies listed on the Indonesia Stock Exchange, as well as to assess whether profitability (ROA) plays a mediating role in that relationship. This study was conducted using a quantitative approach and employed panel data regression analysis on 16 companies over six years of observation (2018–2023), with a total of 96 observation data points. The model used is the Random Effect Model with heteroscedasticity correction through the EGLS method. The findings indicate that ESG disclosures, whether environmental, social, or governance, do not affect profitability and stock returns. Profitability (ROA) has a positive effect on stock returns, but it does not mediate the impact of ESG on those returns. This indicates that investors in the mining industry still prioritize conventional financial indicators over sustainability information in the investment decision-making process. Therefore, it is important for companies to enhance the relevance and integration of ESG into their business strategies in order to make a tangible contribution to market value. This research also opens up space for the exploration of other moderating factors that may strengthen the relationship between ESG and financial performance.

**Keywords:** ESG, Profitability (ROA), Stock Return, Mining Companies

## INTRODUCTION

Attention to sustainability issues and corporate social responsibility has been increasing over the past decade. According to the 2023 report by the Financial Services Authority (OJK), only about 30% of public companies in Indonesia consistently disclose their ESG performance in sustainability reports (Siregar & Rizki, 2023). This indicates that ESG practices in Indonesia still face various challenges, both in terms of corporate awareness and non-binding regulations (Ardianto & Pratama, 2023). ESG is not only a measure of a company's reputation but is also increasingly seen as having an impact on financial performance and company value, including profitability and stock returns.

This phenomenon is highly relevant in the mining sector, which contributes significant carbon emissions and causes socio-economic impacts such as relocation and land conflicts. Therefore, the implementation of ESG is crucial to maintaining the sustainability and operational legitimacy of companies with environmental, social, and complex governance challenges. Meanwhile, the mining sector plays a major role in national carbon emissions, making the implementation of ESG crucial to support the Net Zero Emissions 2060 target (World Bank, 2025). However, there is still a gap between the implementation of ESG and the financial results produced.

Profitability can act as a mediator between ESG and stock returns, as it reflects the company's internal financial performance. Research (Fernando et al., 2023) shows that ESG contributes to the improvement of profitability and company value, so companies with high ESG performance and profitability tend to provide better stock returns.

**Table 1.**  
**Development of the ESG Index and Stock Returns in the Mining Sector in Indonesia from 2018-2023**

Period	Environmental	Social	Governance	Profitabilitas	Stock Return
2018	55,3	57,1	59,4	29,1	11,44
2019	56,8	58,0	60,2	23,5	-12,81
2020	57,2	59,5	61,0	9,6	23,69
2021	58,5	60,2	62,1	121,7	-40,52
2022	60,3	61,8	63,5	78	18,9
2023	62,0	62,5	64,2	23,5	-5,4

Source: Katadata ESG Index, 2024

The table above shows that over the past six years, the ESG scores of mining companies in Indonesia have continuously increased. The scores for each year from 2018 to 2023 in the environmental category increased from 55.3 to 62.0, in the social category from 57.1 to 62.5, and in the governance category from 59.4 to 64.2 (Prayitno et al., 2024). This trend reflects a stronger commitment to sustainability and good governance. This is in line with the views of Sustainalytics (2023) and Bloomberg (2022) that positive ESG disclosures reflect good risk management and potential long-term value for investors.

The theory states that ESG has a positive impact on financial performance, but data in Indonesia show otherwise. Stock returns are actually fluctuating, even decreasing in the years when ESG scores increased, such as in 2019 with a score of -12.81%, in 2021 with a score of -40.52%, and in 2023 with a score of -5.4%. This indicates that the increase in ESG scores has not been consistently followed by an increase in profitability or stock returns.

Although some studies show that ESG affects financial performance (Gunawan & Wahyudi, 2021), research examining the simultaneous or partial relationships between ESG, profitability, and stock returns in the Indonesian mining sector is still limited. With the increasing demands for transparency and sustainability from regulators, investors, and the public, it is important to further investigate how ESG affects stock returns through profitability as a mediating variable. Profitability is considered a logical link because it reflects operational efficiency that bridges non-financial ESG activities with financial outcomes.

This research was conducted on mining sector companies listed on the IDX during the period 2018–2023, taking into account sustainability policies such as the OJK Sustainable Finance Roadmap 2021. This study also fills the research gap regarding the effectiveness of ESG in improving ROA and stock returns, as well as exploring the mediating role of ROA and identifying the ESG dimensions that most significantly impact financial and market performance.

## **REVIEW OF LITERATURE**

### **Environmental, Social, and Governance (ESG)**

Environmental encompasses carbon emission management, energy efficiency, as well as waste and natural resource management. Emission reduction and energy efficiency strategies not only help companies reduce regulatory risks but also increase profitability (MSCI, 2022). In addition, effective waste management also enhances regulatory compliance and strengthens investor appeal (Bloomberg, 2021).

Social encompasses the company's relationships with employees, communities, and other stakeholders, including compliance with human rights and social responsibilities. Good employment policies can enhance productivity and employee retention. Refinitiv (2023) shows that attention to employee well-being has a positive impact on long-term financial performance. On the other hand, human rights violations in the supply chain can decrease consumer trust and trigger sanctions (Sustainalytics, 2022).

Governance includes information transparency, board structure, and shareholder rights protection. Transparency fosters investor trust and positively correlates with market valuation (Cheung et al., 2023). A diverse and independent board structure enhances oversight effectiveness (OECD, 2021), while shareholder rights protection helps attract investors and minimize conflicts of interest (World Economic Forum, 2022).

### **Stock Return**

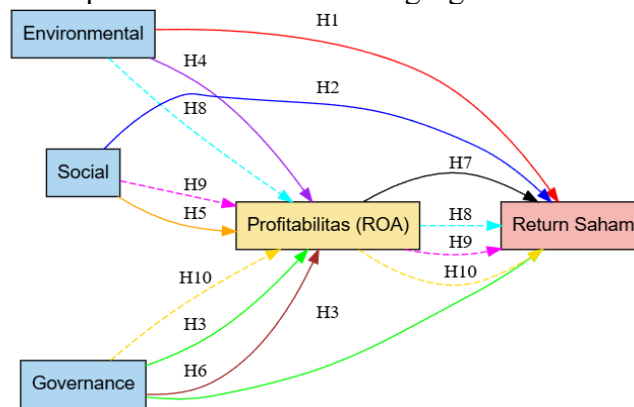
Stock return is a measure of the profit or loss obtained by investors from stock investments over a certain period. Stock return reflects the profit or loss from the investment, either through price increases (capital gain) or dividends (Bodie et al., 2021).

### **Profitability**

Profitability reflects a company's ability to generate profit from its assets and is a key indicator of the company's financial performance. One commonly used financial ratio to measure profitability is Return on Assets (ROA). ROA is a primary indicator in assessing a company's efficiency in generating profit from its assets; the higher the ROA, the better the company's financial performance (Brigham & Ehrhardt, 2022).

## RESEARCH METHOD

This study uses a quantitative approach with a causal method to examine the influence of ESG on stock returns through profitability as a mediating variable. The population of this study consists of all mining sector companies listed on the IDX for the period 2018 - 2023. This sector was chosen because it has a significant environmental and social impact, making the implementation of ESG important. The sample was determined using purposive sampling technique. According to Sugiyono (2021), purposive sampling is a technique for determining samples based on specific criteria tailored to the research objectives. The criteria for determining the sample in this study include: 1) mining companies that consistently present sustainability reports or have complete ESG data, 2) listed on the IDX without delisting from 2018–2023 to maintain data continuity, and 3) having complete data related to stock returns, profitability, and ESG components to support valid statistical analysis. The conceptual framework for this research is presented in the following figure:



**Figure 1.**  
**Conceptual Framework**

The data analysis technique used in the research involves panel data regression analysis using Eviews 12 software, which also includes testing for descriptive statistics, classical assumption tests, and model selection tests, followed by panel data regression analysis and hypothesis testing (Ghozali & Ratmono, 2021). Panel data regression analysis is a statistical analysis method used to examine the direct relationship between Environmental, Social, and Governance (ESG) and stock returns, with profitability as an intervening variable. If profitability has a significant influence on the relationship between ESG and stock returns, then this variable acts as a mediating variable measured using the Sobel test. The regression model used :

$$\text{Stock Return} = \beta_0 + \beta_1 \text{Environmental} + \beta_2 \text{Social} + \beta_3 \text{Governance} + \beta_4 \text{Profitabilitas} + \epsilon.$$

## RESULTS AND DISCUSSION

### Descriptive Statistics

Descriptive statistics are used to describe the characteristics of five main variables: Environmental, Social, Governance, ROA, and stock return based on 96 observations of mining companies on the IDX for the period 2018–2023.

**Table 2.**  
**Results of Descriptive Statistical Testing**

	ENVIRONM...	SOCIAL	GOVERNANCE	ROA	NILAI RET...
Mean	73.67708	75.82292	79.67708	15.09875	18.36298
Median	74.50000	75.00000	80.00000	9.195000	-5.295000
Maximum	90.00000	90.00000	95.00000	76.26000	466.5600
Minimum	60.00000	60.00000	62.00000	-9.840000	-62.00000
Std. Dev.	6.607006	7.726911	7.172308	17.55669	77.61448
Skewness	-0.057689	0.066397	-0.162198	1.603714	2.748697
Kurtosis	2.575216	2.078298	2.453247	5.216071	14.01869
Jarque-Bera	0.775014	3.468672	1.616683	60.79428	606.5313
Probability	0.678747	0.176517	0.445596	0.000000	0.000000

Source: Eviews12 output, processed by the author, 2025

The average scores for each ESG are 73.68 (Environmental), 75.82 (Social), and 79.68 (Governance), with maximum values of 90 - 95 and minimum values of 60 - 62. The standard deviations for each variable range from 6.67 to 7.72, indicating moderate variation among companies. The skewness and kurtosis values of all three are close to zero and three, with Jarque-Bera test probabilities of 0.6787 (Environmental), 0.1765 (Social), and 0.4456 (Governance), all greater than 0.05. This indicates that the three ESG variables are normally distributed (Gujarati & Porter, 2021). The highest average score is found in the Governance dimension, indicating that companies tend to prioritize governance aspects in the implementation of ESG.

On the other hand, the ROA and stock return variables show a non-normal distribution. ROA has an average of 15.10 with a standard deviation of 17.65, and a wide range of values from -9.84 to 76.26. Stock returns have an average of 18.36 with a very high deviation of 77.61 and extreme values ranging from -62.00 to 466.56. The skewness and kurtosis values for ROA and stock returns are far from normal distribution values (skewness 1.60 and 2.75; kurtosis 5.22 and 14.02, respectively), with a Jarque-Bera probability of 0.0000, indicating a significant deviation from normal distribution. The presence of outliers and non-normal distribution in both variables is a common phenomenon in financial studies, considering market volatility and various external factors that can affect the company's financial performance (Brooks, 2019).

**Panel Data Regression Model Selection Test**

**Table 3.**  
**Chow Test Results**

Redundant Fixed Effects Tests  
 Equation: Untitled  
 Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	0.550959	(15,76)	0.9022
Cross-section Chi-square	9.909687	15	0.8254

Source: Eviews12 output, processed by the author, 2025

The Chow test results show a probability value of the cross-section F of 0.9022 and the cross-section Chi-square of 0.8254, both of which are greater than 0.05 ( $p > 0.05$ ). Therefore, it is concluded that the more appropriate model is the Pooled Least Square (PLS).

Thus, a Lagrange Multiplier (LM) test was conducted to compare PLS with the Random Effect Model.

**Table 4.**  
**Lagrange Multiplier Test Results**

Lagrange Multiplier Tests for Random Effects  
 Null hypotheses: No effects  
 Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided  
 (all others) alternatives

	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	1.676420 (0.1954)	9.965605 (0.0016)	11.64203 (0.0006)

Source: Eviews12 output, processed by the author, 2025

The results of the Lagrange Multiplier test show a Breusch-Pagan both value of 11.6420 with a probability of  $0.0006 \leq 0.05$ , thus concluding that the Random Effect Model (REM) is more appropriate than PLS. Next, a Hausman test is conducted to determine the best model between Fixed Effect and Random Effect.

**Table 5.**  
**Hausman Test Results**

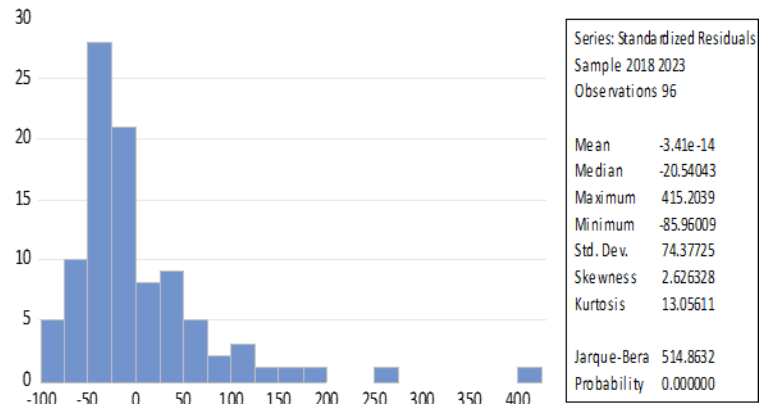
Correlated Random Effects - Hausman Test  
 Equation: Untitled  
 Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.128810	4	0.9980

Source: Eviews12 output, processed by the author, 2025

The Hausman test results show a cross-section Chi-square value of 0.1288 with a probability of  $0.9980 > 0.05$ , concluding that the Random Effect Model is more appropriate than the Fixed Effect Model. Based on the results of these three tests, the most suitable panel regression model to use in this study is the Random Effect Model (REM), as it can capture individual effects between companies without any correlation between those effects and the independent variables.

**Classic Assumption Test**



**Figure 2.**

**Results of the Normality Test**

Source: Eviews12 output, processed by the author, 2025

The normality test was conducted using the Jarque-Bera method, which measures the fit of the residual distribution to the normal distribution based on skewness and kurtosis values (Brooks, 2019). The results show a Jarque-Bera value of 514.8632 with a probability of 0.0000, skewness of 2.626, and kurtosis of 13.056, indicating that the residuals are not normally distributed. However, in panel data regression, violations of the normality assumption do not always pose a serious problem, especially if the sample size is large. Estimators like Random Effects can still produce efficient and consistent estimates (Gujarati & Porter, 2021).

**Table 6.**

**Multicollinearity Test Results**

Variabel Independen	R <sup>2</sup>	VIF	Information
Environmental	0,789919	4.76	There is no multicollinearity
Social	0,762609	4.21	There is no multicollinearity
Governance	0,691370	3.24	There is no multicollinearity
Profitability	0,096275,	1.11	There is no multicollinearity

Source: Eviews12 output, processed by the author, 2025

The multicollinearity test was conducted using the Variance Inflation Factor (VIF) approach. All independent variables have VIF values that are well below the general tolerance threshold (VIF < 10), namely 4.76 for the variable, 4.21 for Social, 3.24 for Governance, and 1.11 for Profitability. This indicates that there is no serious multicollinearity in the model (Gujarati & Porter, 2021).

**Table 7.**  
**Results of the Heteroscedasticity Test**

Panel Cross-section Heteroskedasticity LR Test  
Equation: UNTITLED  
Specification: NILAI\_RETURN\_SAHAM C ENVIRONMENTAL SOCIAL GOVERNANCE ROA  
Null hypothesis: Residuals are homoskedastic

	Value	df	Probability
Likelihood ratio	68.32569	16	0.0000

Source: Eviews12 output, processed by the author, 2025

The heteroscedasticity test using the Likelihood Ratio (LR Test) method resulted in a probability value of  $0.0000 < 0.05$ , indicating the presence of heteroscedasticity.

**Table 8.**  
**Results of the EGLS Panel Estimation Method**

Unrestricted Test Equation:  
Dependent Variable: NILAI\_RETURN\_SAHAM  
Method: Panel EGLS (Cross-section weights)  
Date: 07/05/25 Time: 11:49  
Sample: 2018 2023  
Periods included: 6  
Cross-sections included: 16  
Total panel (balanced) observations: 96  
Iterate weights to convergence  
Convergence achieved after 17 weight iterations

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	81.61327	46.00896	1.773856	0.0794
ENVIRONMENTAL	0.883930	1.393408	0.634365	0.5274
SOCIAL	-1.445968	1.289325	-1.121492	0.2650
GOVERNANCE	-0.691201	0.753323	-0.917536	0.3613
ROA	1.334902	0.314614	4.242986	0.0001

Source: Eviews12 output, processed by the author, 2025

To address this issue, the Panel EGLS (Cross-section Weights) estimation method is used to obtain parameters that are robust against violations of this assumption.

**Table 9.**  
**Results of the Autocorrelation Test**

R-squared	0.081679	Mean dependent var	18.36298
Adjusted R-squared	0.041313	S.D. dependent var	77.61448
S.E. of regression	75.99433	Akaike info criterion	11.54987
Sum squared resid	525537.6	Schwarz criterion	11.68343
Log likelihood	-549.3939	Hannan-Quinn criter.	11.60386
F-statistic	2.023461	Durbin-Watson stat	2.218229
Prob(F-statistic)	0.097694		

Source: Eviews12 output, processed by the author, 2025

The autocorrelation test was conducted using the Residual Cross-Section Dependence Test approach, which is suitable for panel data. As a complement, a Durbin-Watson (DW) value of 2.2182 was also obtained from the Panel Least Squares regression. Because the value falls within the normal range (1.5 - 2.5) and is close to 2, it is concluded that the model does not experience autocorrelation, and the assumption of residual independence has been met.

With the fulfillment of most classical assumptions or the adjustments made to the estimation methods for the identified violations, the panel data regression model used in this study can be considered feasible and valid for further analysis.

**Hypothesis Testing and Discussion**

Based on the results of the tests that have been conducted, the researcher will present the influence of each variable and explain the hypothesis test results in the following table.

**Table 10.**

**Hypothesis Testing**

Hip.	Variable	T-statistic	Prob.	Result
H1	Environmental → Stock Return	-1.120	0.2658	Rejected
H2	Social → Stock Return	0.8732	0.3848	Rejected
H3	Governance → Stock Return	-0.1869	0.8521	Rejected
H4	Environmental → Profitability	-0.6321	0.5289	Rejected
H5	Social → Profitability	1.2154	0.2273	Rejected
H6	Governance → Profitability	0.3044	0.7615	Rejected
H7	Profitability → Stock Return	2.1954	0.0306	Accepted

Source: Eviews12 output, processed by the author, 2025

**The Influence of Environmental Disclosure on Stock Returns**

The first hypothesis in this study states that the disclosure of the Environmental variable has a positive effect on the stock returns of mining companies listed on the Indonesia Stock Exchange (IDX) during the period 2018–2023. The p-value of the Environmental variable is  $0.2658 > 0.05$ , so the Environmental variable does not affect the stock return value. The coefficient of -2.9902 is negative, which means that an increase in environmental disclosure tends to be followed by a decrease in stock returns. Therefore, the first hypothesis (H1) is rejected. This result is in line with the findings of Zhang et al. (2022), which indicate that in the heavy industry sector, environmental disclosure is perceived as an increase in cost burden that reduces short-term efficiency. Dewi and Prasetya (2020) concluded that environmental disclosure has not yet significantly affected market value due to the low attention of investors to environmental issues, especially in the natural resources sector.

**The Influence of Social Disclosure on Stock Returns**

The second hypothesis states that the disclosure of the Social variable has a positive effect on the stock return of mining companies on the IDX. The p-value of social is 0.3848, which is  $> 0.05$ , meaning social does not affect the stock return value. The coefficient of 1.8652 is positive, but since the probability value is greater than 0.05, social does not affect the stock return. Therefore, the second hypothesis (H2) is rejected. This result is in line with the findings of Widyastuti and Handayani (2021), which state that social disclosure has not yet impacted market value or stock returns, especially in sectors that have not faced strict ESG regulatory pressures.

### **The Influence of Governance Disclosure on Stock Returns**

The third hypothesis in this study states that the disclosure of the Governance variable has a positive effect on stock returns. The p-value for governance is  $0.8521 > 0.05$ , meaning governance does not affect stock return values. The coefficient of  $-0.3821$  is negative, contrary to the hypothesis, and the very high p-value indicates that governance disclosure does not affect stock returns. Therefore, the third hypothesis (H3) is rejected. These findings are in line with the study by Yusrianti and Anindyajati (2022), which states that governance disclosure does not necessarily have a direct impact on stock returns, especially if the content of the disclosure is not considered material by investors. In the context of the capital-intensive and environmentally and socially risky mining industry, investors are likely to consider operational performance and risk exposure more than formal governance structures.

### **The Influence of Environmental Disclosure on Profitability**

The fourth hypothesis in this study states that the disclosure of the Environmental variable has a positive effect on the profitability (ROA) of mining companies listed on the IDX. The p-value of the environmental variable is  $0.5289 > 0.05$ , meaning that the environmental variable does not affect profitability. The coefficient of  $-0.4759$  is negative, indicating that an increase in environmental disclosure tends to decrease profitability (ROA). Therefore, the hypothesis (H4) is rejected. This finding is supported by the research of Widyaningsih and Arfianto (2021), which states that environmental disclosure in mining companies is actually inversely related to profitability due to the high environmental costs that must be borne.

### **The Influence of Social Disclosure on Profitability**

The fifth hypothesis states that the disclosure of the Social variable has a positive effect on the company's profitability. The p-value for social is  $0.2273 > 0.05$ , meaning social does not affect profitability. The coefficient of  $0.8483$  is positive, consistent with the initial hypothesis, but since the probability value is greater than  $0.05$ , social factors do not affect profitability. Therefore, the hypothesis (H5) is rejected. These results are consistent with the research by Widyastuti and Handayani (2021), which found that social disclosure has not yet influenced financial performance due to minimal external pressure and the absence of uniform reporting standards in many industrial sectors. Another study by Kabir and Thai (2021) found that the impact of social activities on financial performance depends on the industry context and stakeholder perceptions, so the effect is not always reflected in indicators such as ROA.

### **The Influence of Governance Disclosure on Profitability**

The sixth hypothesis states that the disclosure of the Governance variable has a positive effect on the profitability of mining companies. The p-value of governance is  $0.7615 > 0.05$ , meaning governance does not affect profitability. The coefficient of  $-0.1625$  is positive, consistent with the initial assumption that its effect would be positive, but since the probability value is greater than  $0.05$ , governance does not affect profitability. Therefore, the hypothesis (H6) is rejected. The research by Rakhman and Subowo (2020) found that governance disclosure in the extractive sector has not yet had a significant impact on financial performance, due to the low quality of disclosure and limited external oversight.

### **The Influence of Profitability on Stock Returns**

The seventh hypothesis states that the profitability variable has a positive effect on the stock returns of mining companies listed on the Indonesia Stock Exchange for the period

2018-2023. The p-value of profitability (ROA) is  $0.0306 < 0.05$ , with a coefficient of 1.010 being positive, meaning it has a positive effect, thus profitability (ROA) positively affects the stock return value. Therefore, the hypothesis (H7) is accepted. The research by Sutrisno and Gunawan (2020) shows that ROA is an important indicator in influencing investment decisions because it reflects the efficiency of the company's asset use in generating profits. The study by Adiningsih and Wardani (2021) supports this by finding that mining companies with high profitability tend to experience an increase in stock returns because they are considered to have greater growth potential and resilience amid commodity price fluctuations.

#### **Profitability Mediates the Influence of Environmental Factors on Stock Returns**

The eighth hypothesis tests the mediating role of profitability (ROA) in the relationship between environmental disclosure and stock returns of mining companies on the IDX for the period 2018-2023. Based on the Sobel test calculation, the Z value =  $-0.6111 < 1.96$ , thus it is stated to be not significant. Thus, there is no mediating effect of profitability (ROA) in the relationship between Environmental and stock returns. Therefore, hypothesis (H8) is rejected. This finding is supported by the research of Triani, Syahrul, and Kurniawan (2025), which examined mining companies listed on the IDX. Their research results show that the disclosure of environmental performance does not have a significant effect on ROA, thus not forming a mediation path for stock returns. They concluded that the environmental activities conducted by the company have not yet been able to create short-term economic value as reflected in profitability. Another finding in the research by Putri and Aris (2024) shows that the disclosure of corporate environmental responsibility does not have a positive impact on profitability (ROA) in the mining sector in Indonesia. Furthermore, since ROA did not increase, no mediating effect on stock returns was found. This research emphasizes that environmental disclosure is often viewed more as a regulatory obligation rather than a strategy for enhancing corporate value. Furthermore, Putra and Megawati (2023) in their research on ESG-rated companies also found that environmental aspects do not have an impact on ROA, and therefore do not form a mediating effect in increasing stock returns. On the contrary, only the governance dimension has proven capable of significantly improving financial performance.

#### **Profitability Mediates the Social Influence on Stock Returns**

The ninth hypothesis tests the mediating role of profitability (ROA) on the influence of the social dimension on stock returns of mining companies listed on the IDX for the period 2018-2023. The results of the Sobel test calculation show a Z value of  $1.0067 < 1.96$ , indicating no effect. Thus, there is no mediating effect of profitability (ROA) in the relationship between Social and stock returns. Therefore, the hypothesis (H9) is rejected. These findings are in line with the research results of Wardhani and Hidayati (2023), which found that the disclosure of corporate social responsibility (CSR) in the social dimension does not significantly affect profitability (ROA) in mining companies in Indonesia. The research shows that the company's efforts in the social aspect have not yet been able to make a significant contribution to the improvement of the company's financial performance. Research by Hatuwe and Hamidah (2024) on coal mining companies also shows that the disclosure of CSR social aspects does not significantly affect stock returns, and no mediation pathway through ROA was found. This indicates that investors tend not to respond positively to the company's social activities if they do not directly impact financial performance.

### **Profitability Mediates the Influence of Governance on Stock Returns**

This hypothesis tests whether profitability (ROA) mediates the influence of governance dimensions on the stock returns of mining companies listed on the IDX for the period 2018-2023. The results of the Sobel test calculation show a Z value of  $0.3031 < 1.96$ , indicating no effect. Thus, there is no mediating effect of profitability (ROA) in the relationship between Governance and stock returns. Therefore, the hypothesis (H10) is rejected. The findings of Maulina and Prastiwi's (2023) research, which state that the principles of Good Corporate Governance do not affect ROA and do not form mediation through earnings management.

### **CONCLUSION**

This study aims to examine the impact of disclosing Environmental, Social, and Governance (ESG) dimensions on stock returns, with profitability (ROA) as a mediating variable, in mining sector companies listed on the Indonesia Stock Exchange (IDX) during the period 2018–2023. Based on the results of the panel data regression analysis and mediation test using the Sobel test, it can be concluded that most ESG disclosures do not have a significant impact on stock returns or the profitability of the company. Specifically, the disclosure of Environmental, Social, and Governance does not show a significant relationship either with stock returns or with ROA. Some relationship coefficients indicate a negative direction, suggesting that the increase in ESG disclosure is not necessarily positively responded to by the market or contributes to the company's financial efficiency. On the other hand, only ROA has been proven to have a positive and significant impact on stock returns, indicating that investors still rely on financial indicators as the main signal in investment decision-making. The results of the mediation test also show that ROA does not mediate the relationship between the three dimensions of ESG and stock returns. This indicates that the indirect path between ESG and stock returns through profitability is not statistically formed. These findings suggest that in the Indonesian mining sector, ESG disclosure practices are not yet considered a determining factor for market performance or company profitability. Some possible causes include the low quality of ESG disclosures, minimal regulatory pressure, and a lack of investor attention to sustainability issues. Therefore, increasing the market value of the company through ESG disclosure requires improvements in reporting quality, strengthening regulations, and educating investors about the importance of sustainability as part of the company's long-term strategy.

### **REFERENCES**

- Adiningsih, S., & Wardani, T. Y. (2021). Pengaruh kinerja keuangan terhadap return saham pada perusahaan pertambangan di Bursa Efek Indonesia. *Jurnal Riset Keuangan dan Akuntansi*, 7(2), 112–121.
- Ardianto, M. A., & Pratama, I. R. (2023). Implementasi pengungkapan ESG di perusahaan sektor ekstraktif di Indonesia. *Jurnal Riset Akuntansi dan Keuangan*, 15(1), 55–70. <https://doi.org/10.23969/jrak.v15i1.9876>.
- Bloomberg. (2021). *ESG disclosure guide: Data definitions and methodology*. Bloomberg L.P.
- Bloomberg. (2023). *Bloomberg ESG data and scores*. Bloomberg L.P. <https://www.bloomberg.com>

- Bodie, Z., Kane, A., & Marcus, A. J. (2021). *Investments (12th ed.)*. New York: McGraw-Hill Education.
- Brigham, E. F., & Ehrhardt, M. C. (2022). *Financial management: Theory & practice (16th ed.)*. Boston, MA: Cengage Learning.
- Brooks, C. (2019). *Introductory econometrics for finance (4th ed.)*. Cambridge University Press. <https://doi.org/10.1017/9781108524872>.
- Cheung, A. W. K., Jiang, Y., Mak, Y. T., & Tan, W. (2023). ESG performance and firm valuation in the Asia-Pacific region. *Journal of International Financial Markets, Institutions & Money*, 84, 102789. <https://doi.org/10.1016/j.intfin.2023.102789>.
- Dewi, R. K., & Prasetya, A. B. (2020). Pengaruh pengungkapan ESG terhadap kinerja keuangan perusahaan. *Jurnal Riset Akuntansi Multiparadigma*, 11(2), 187–203.
- Fernando, G. D., Jaffar, A., & Seah, M. (2021). Do ESG scores affect firm value? Evidence from global firms. *Journal of Risk and Financial Management*, 14(7), 314. <https://doi.org/10.3390/jrfm14070314>.
- Ghozali, I., & Ratmono, D. (2020). *Analisis Multivariat dan Ekonometrika Teori, Konsep, dan Aplikasi dengan Eviews 10 (2nd ed.)*. Semarang: Badan Penerbit Universitas Diponegoro.
- Gujarati, D. N., & Porter, D. C. (2021). *Basic econometrics (6th ed.)*. McGraw-Hill Education.
- Gunawan, A. W., & Wahyudi, S. (2021). ESG disclosure dan nilai perusahaan: Studi empiris pada perusahaan tercatat di Bursa Efek Indonesia. *Jurnal Ilmu Manajemen dan Bisnis*, 12(2), 134–145.
- Hatuwe, A., & Hamidah, N. (2024). Pengaruh Pengungkapan CSR terhadap Kinerja Keuangan dan Return Saham pada Perusahaan Tambang Batu Bara. *Jurnal Akuntansi, Keuangan, dan Bisnis*, 7(1), 44–56. <https://doi.org/10.30656/jak.v12i1.9459>
- Kabir, M. H., & Thai, M. T. T. (2021). Social responsibility and financial performance: The moderating role of industry context. *Journal of Cleaner Production*, 297, 126654. <https://doi.org/10.1016/j.jclepro.2021.126654>.
- Katadata Insight Center. (2024). ESG Index 2024: Peningkatan perusahaan berdasarkan kinerja ESG di Indonesia. Jakarta: Katadata.co.id. <https://katadata.co.id>
- Maulina, S. P., & Prastiwi, A. (2023). Pengaruh Good Corporate Governance Terhadap Kinerja Keuangan Perusahaan Dengan Manajemen Laba Sebagai Variabel Mediasi (Studi Empiris Pada Perusahaan Sektor Perbankan Yang Terdaftar Di Bursa Efek Indonesia Tahun 2020-2021). *Tesis*. Universitas Diponegoro.
- MSCI. (2022). *ESG ratings methodology*. MSCI ESG Research LLC. <https://www.msci.com/our-solutions/esg-investing>.
- Naela Cahaya Putri, & Muhammad Abdul Aris. (2024). Effect Of Environmental Performance, Environmental Costs, And Corporate Social Responsibility On Financial Performance Of Mining Companies Listed On The Indonesia Stock Exchange In 2020-2022. *Jurnal Ekonomi*, 13(03), 978–989. <https://ejournal.seaninstitute.or.id/index.php/Ekonomi/article/view/5146>
- Prayitno, A., Wibowo, A., & Fitriani, N. (2024). Dampak pengungkapan ESG terhadap kinerja keuangan pada perusahaan pertambangan yang terdaftar di Bursa Efek Indonesia. *Jurnal Akuntansi dan Keuangan Indonesia*, 21(1), 1–15. <https://doi.org/10.9744/jaki.21.1.1-15>.

- Putra, A., & Megawati, L. (2023). Influence Of Csr Disclosure Aspects Environmental, Social And Governance (ESG) On Return On Asset (ROA). *Journal for Management Student (JFMS)*, 3(2), 39–47. <https://doi.org/10.35706/jfms.v3i2.10014>
- Rakhman, F., & Subowo, S. (2020). Pengaruh pengungkapan tata kelola perusahaan terhadap kinerja keuangan pada sektor pertambangan. *Jurnal Akuntansi dan Keuangan Daerah*, 15(2), 101–114.
- Refinitiv. (2023). Refinitiv ESG scores methodology. Refinitiv (an LSEG Business). <https://www.refinitiv.com>
- Siregar, S. V., & Rizki, M. N. (2023). ESG dan prospek pengungkapan keberlanjutan di Indonesia: Tinjauan regulasi dan implementasi. *Jurnal Akuntansi Multiparadigma*, 14(1), 80–94. <https://doi.org/10.21776/ub.jamal.2023.14.1.5>.
- Sugiyono. (2021). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Alfabeta.
- Sustainalytics. (2022). *ESG risk ratings methodology*. Morningstar Sustainalytics. <https://www.sustainalytics.com>
- Sustainalytics. (2024). ESG Risk Ratings: A measure of corporate sustainability. Morningstar Sustainalytics. <https://www.sustainalytics.com/esg-rating>.
- Sutrisno, T., & Gunawan, S. (2020). Pengaruh rasio keuangan terhadap return saham pada sektor pertambangan. *Jurnal Ilmu dan Riset Akuntansi*, 9(4), 1–17.
- Triani, R., Syahrul, & Kurniawan, H. (2025). Pengaruh Kinerja Lingkungan terhadap Profitabilitas Perusahaan Pertambangan yang Terdaftar di BEI. *OWNER: Riset dan Jurnal Manajemen*, 9(1), 88–96.
- Wardhani, I., & Hidayati, N. (2023). Analisis Pengaruh Pengungkapan CSR terhadap Profitabilitas Perusahaan Sektor Pertambangan di Indonesia. *Jurnal Studi Riset*, 6(2), 75–82. <https://doi.org/10.55606/jsr.v1i2.987>
- Widyaningsih, S., & Arfianto, A. (2021). Pengaruh pengungkapan ESG terhadap kinerja keuangan perusahaan sektor pertambangan di BEI. *Jurnal Akuntansi dan Bisnis*, 21(2), 145–160.
- Widyastuti, T., & Handayani, S. R. (2021). Pengaruh pengungkapan tanggung jawab sosial terhadap nilai perusahaan dengan kinerja keuangan sebagai variabel intervening. *Jurnal Akuntansi dan Auditing Indonesia*, 25(1), 1–12.
- World Bank. (2025). Indonesia Economic Prospects: Navigating the global and domestic headwinds. Washington, DC: The World Bank. <https://www.worldbank.org/en/country/indonesia>
- World Economic Forum. (2022). Measuring stakeholder capitalism: Towards common metrics and consistent reporting of sustainable value creation. Geneva: WEF. <https://www.weforum.org>
- Yusrianti, R., & Anindyajati, M. (2022). Pengaruh pengungkapan ESG terhadap kinerja perusahaan: Studi empiris pada sektor pertambangan. *Jurnal Riset Akuntansi dan Bisnis*, 22(1), 45–59.
- Zhang, X., Zhou, X., & Li, Y. (2022). ESG performance and corporate financial resilience: Evidence from global firms. *Sustainability*, 14(15), 9012. <https://doi.org/10.3390/su14159012>