

## **Profitability, Leverage, and Stock Prices: The Moderating Role of ESG Disclosure**

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### **Abstract**

*This research investigates the impact of profitability and leverage on stock prices, utilising Environmental, Social, and Governance (ESG) disclosure as a moderating variable. The analysis is predicated on 33 basic materials companies listed on the Indonesia Stock Exchange in 2024, chosen via purposive sampling. IBM SPSS Statistics was used to process the data with multiple linear regression and Moderated Regression Analysis (MRA). The results show that Return on Assets (ROA), which measures profitability, has a positive and statistically significant effect on stock prices ( $\beta = 0.065$ ;  $p = 0.000$ ). Conversely, leverage, as indicated by the Debt to Equity Ratio (DER), exhibits no significant impact ( $\beta = 0.001$ ;  $p = 0.306$ ). On the other hand, ESG disclosure has a strong and positive direct effect on stock prices ( $\beta = 1.146$ ;  $p = 0.000$ ). Moreover, ESG disclosure enhances the correlation between profitability and stock prices ( $\beta = 0.206$ ;  $p = 0.000$ ), whereas it does not significantly influence the correlation between leverage and stock prices ( $\beta = 0.005$ ;  $p = 0.607$ ). In general, the results show that when investors decide where to put their money, they tend to care more about profitability and sustainability than about capital structure.*

**Keywords:** Profitability, Leverage, Stock Price, ESG Disclosure, Moderating Variable

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## **INTRODUCTION**

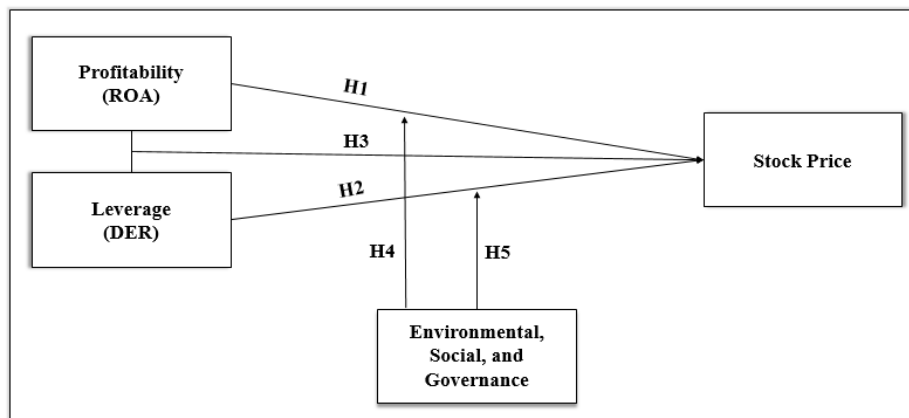
The basic materials sector plays a strategic role in supporting industrial activities by supplying essential raw materials for various production processes. Companies that extract, process, and distribute raw materials used by the manufacturing and construction industries are part of this sector. Because of its place in the global supply chain, it is a key driver of economic growth. Changes in the availability of raw materials can have a direct impact on industrial productivity and economic stability (Gunawan et al., 2025). Throughout 2024, this sector faced significant challenges due to global commodity price fluctuations, rising interest rates, and increasing production costs. This condition is reflected in the relatively modest growth of the Wholesale Price Index (IHPB) at 1,98% annually, with the mining subsector even experiencing a yearly decline (Badan Pusat Statistik, 2025). Such uncertainties have heightened investor concerns, particularly regarding logistics costs, trade policies, and commodity price volatility.

But things started to change at the start of 2025. Better prices for goods, better performance in certain sectors, and government support especially for downstream industrial development helped bring back some hope. This recovery was also helped by the growth of processing plants in the country and a more stable global economy (Werdiningsih, 2025). Even so, the general picture is not yet completely stable. This means that investors need to be more picky and think more deeply about their choices. Profitability and leverage are two of the most important financial indicators that are still used to measure how well a company is doing. Return on Assets (ROA) shows how well a company makes money from its assets and is often linked to higher investor confidence (Kartika et al., 2024). The Debt to Equity Ratio (DER), on the other hand, shows how much a company needs outside funding. Higher levels are usually linked to higher financial risk (Tannia & Suharti, 2020). At the same time, it's not enough to only look at financial metrics. More and more, investors are paying attention to non-financial information, especially Environmental, Social, and Governance (ESG) disclosure. ESG reporting gives a more complete picture of how companies deal with issues related to sustainability. It has also been linked to changes in how investors see companies and how much they are worth (Oktavianti &

Prayogo, 2022). According to signalling theory, these kinds of disclosures, whether they are financial or not, help companies reduce information asymmetry and let the market know how they are doing overall (Spence, 1973). In this context, profitability and leverage serve as financial indicators, whereas ESG disclosure offers an extra layer of interpretation that could affect how those indicators are understood.

But empirical evidence doesn't always point in the same direction. Certain studies indicate that profitability exerts a distinct and favorable influence on stock prices, evidenced in manufacturing firms from 2019 to 2021 (Rahayu & Adi, 2023) and in financial sector companies from 2022 to 2025 (Salsabila et al., 2025). Conversely, the function of leverage remains ambiguous. (Muthmainna et al., 2023) report a substantial correlation concerning PT Kimia Farma Tbk (2019-2021), whereas (Tannia & Suharti, 2020) observe no significant impact within agricultural firms during 2015-2018. In addition to financial factors, ESG disclosure has been associated with fluctuations in stock prices. Evidence from the mining sector indicates that ESG performance send signals that investors consider when assessing firm value (Purnomo et al., 2024). These findings indicate an unresolved issue: the relationship between financial performance and stock prices does not seem to be entirely clear-cut. This means that other things, like ESG disclosure, could also have an effect on this relationship or even change it. This approach is particularly pertinent in the basic materials sector, characterized by significant exposure to environmental risks, commodity fluctuations, and sustainability issues. Based on this reasoning, the present study seeks to explore how profitability and leverage influence stock prices, while also examining whether ESG disclosure acts as a moderating factor in basic materials companies listed on the Indonesia Stock Exchange in 2024.

**Figure 1. Framework**



According to experts, especially Sugiyono (2019/2020), quantitative research is a research method based on the philosophy of positivism, used to research certain populations or samples, where data collection uses research instruments, and data analysis is quantitative/statistical with the aim of testing predetermined hypotheses. This research employs a quantitative associative approach to analyze the causal relationship between independent variables (Digital Adaptability and Work-Life Balance) and the dependent variable (Employee Performance) (Duan et al., 2023). The study was conducted at PT Bank SMBC Area Cirebon, Indonesia, from November to December 2025. The population in this study comprised all employees of PT Bank SMBC Area Cirebon, totaling 105 individuals across various divisions, including Micro Business, Customer Service, Teller, Marketing, Back Office, and Managerial roles. The sampling technique used was Saturated Sampling (census), wherein the entire population served as the sample (Soroya et al., 2022).

Data collection involved both primary and secondary sources. Primary data were gathered through online questionnaires (Google Forms) distributed to the respondents. The questionnaire utilized a 5-point Likert Scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

Secondary data were obtained from human resource documents, scientific journals, and relevant company archives.

For data analysis, the study utilized Statistical Package for the Social Sciences (SPSS) software. The analysis process included descriptive statistics, validity and reliability tests, and classical assumption tests (normality and multicollinearity) to ensure the data met regression requirements (Abu-Bader, 2021). Hypotheses were tested using Multiple Linear Regression analysis, the Coefficient of Determination ( $R^2$ ), the t-test (partial), and the F-test (simultaneous). The operational definitions and measurements of the variables are presented in Table 1.

Table 1. Variable Measurements

Variable	Operational Definition	Indicators	Scale
<b>Digital Adaptability (X1)</b>	The ability of employees to adjust to technological changes, digital systems, and IT-based work processes.	1. Understanding digital technology usage. 2. Willingness to learn new technology. 3. Ability to work in virtual teams. 4. Proficiency in using digital tools/software.	Likert (1–5)
<b>Work-Life Balance (X2)</b>	The state where an individual feels satisfied and equally engaged in both their work role and personal life role.	1. Time Balance (managing time between work and life). 2. Involvement Balance (psychological engagement in both roles). 3. Satisfaction Balance (satisfaction in both roles).	Likert (1–5)
<b>Employee Performance (Y)</b>	The actual actions or outcomes achieved by employees as part of their contribution to organizational goals.	1. Quality of work (accuracy/standard). 2. Quantity of work (target achievement). 3. Timeliness. 4. Effectiveness (resource use). 5. Independence (initiative).	Likert (1–5)

## RESEARCH METHODS

This study employs a quantitative approach with a causal research design to examine the relationship between financial performance and stock prices. Quantitative research is widely used to test hypotheses and analyze relationships among variables using numerical data and statistical techniques (Starbuck, 2023). In addition, causal research design aims to identify cause-and-effect relationships between variables by examining how changes in independent variables influence dependent variables. In this study, profitability and leverage are treated as independent variables, while stock price is the dependent variable. Profitability is measured using Return on Assets (ROA), and leverage is measured using the Debt to Equity Ratio (DER). Furthermore, Environmental, Social, and Governance (ESG) disclosure is incorporated as a moderating variable, which may strengthen or weaken the relationship between financial performance and stock prices, potentially influencing investor perceptions and decisions based on a company's sustainability practices.

ROA is a way to find out how much money a business makes. It tells you how well a business can use its assets to make money. To find it, divide the total assets by the net income (Kasmir, 2019). The DER shows how much debt a company has in its capital structure. To find

it, divide the total amount of debt by the total amount of equity (Kasmir, 2019). On the other hand, ESG disclosure is based on how much information the company gives about its efforts to be more environmentally friendly. This shows how committed it is to ESG principles. In 2024, this study looked at 113 basic materials companies on the IDX. Purposive sampling was used to choose the sample based on predetermined standards. Companies that meet these criteria must publish full annual financial reports, report profits, provide stock price data in Indonesian Rupiah, and make ESG or sustainability reports available. Table 1 shows the steps to take to choose the sample based on these criteria.

**Table 1. Purposive Sampling**

No	Criteria	Number
1	Companies that were on the IDX in 2024.	113
2	Companies that didn't disclose full yearly financial statements or give annual stock price data for the year 2024 in Indonesian Rupiah (IDR).	(26)
3	Companies that did not report positive net income in their financial statements.	(14)
4	Companies that did not provide sustainability reports or ESG disclosure (Sustainability Report).	(40)
<b>Total Sample</b>		<b>33</b>

The study utilizes secondary data sourced from publicly accessible materials, such as annual financial reports, ESG or sustainability reports, and stock price information disseminated by the Indonesia Stock Exchange and the respective company websites. The documentation method was used to gather data by systematically collecting and recording relevant information from these sources. This study employs multiple linear regression with a moderating variable approach, specifically Moderated Regression Analysis (MRA), for data analysis. This method is employed to analyze both the direct impacts of profitability and leverage on stock prices, as well as the moderating influence of ESG disclosure within these relationships. Before testing the hypothesis, classical assumption tests such as normality, heteroscedasticity, and multicollinearity tests were performed to verify the regression model's robustness. IBM SPSS Statistics was used to process and analyze all the data so that the results would be accurate and unbiased.

## RESULTS AND DISCUSSION

**Table 2. Descriptive Statistics**

Variable	N	Minimum	Maximum	Mean	Std. Deviation
ROA	33	0.06	0.71	0.2272	0.15106
DER	33	0.21	1.56	0.7682	0.36653
Stock Price	33	3.09	8.98	5.9364	1.45341
ESG	33	2.42	4.59	3.8537	0.57636
Valid N (listwise)	33				

Source: Authors' calculation using IBM SPSS Statistics

Table 2 presents the descriptive statistics of the variables used in this study, including Return on Assets (ROA), Debt to Equity Ratio (DER), stock prices, and ESG disclosure. The results show that ROA has a mean value of 0.2272, with a minimum value of 0.06 and a maximum value of 0.71, as well as a standard deviation of 0.15106. This indicates variation in profitability levels among the sampled companies. Meanwhile, DER has a mean value of 0.7682, ranging from 0.21 to 1.56, with a standard deviation of 0.36653, reflecting differences in the use

of debt across firms. For stock prices, the mean value is 5.9364, with minimum and maximum values indicating the range of stock price movements during the observation period. The standard deviation suggests variability in stock prices among the companies in the sample. In addition, ESG disclosure has a mean value of 3.8537, representing the level of ESG reporting among the sampled firms, with variation captured by its standard deviation.

**Table 3. Test of Normality**

Variable	Shapiro-Wilk		
	Statistic	df	Sig.
ROA	0.980	33	0.777
DER	0.950	33	0.136
Stock Price	0.970	33	0.474
ESG	0.936	33	0.052

Source: Authors' calculation using IBM SPSS Statistics

The Shapiro–Wilk test was used to check for normality. Table 3 shows that the significance values for all variables ROA (0.777), DER (0.136), stock price (0.474), and ESG (0.052) are all higher than 0.05. These results point to the fact that the data are roughly normally distributed. Therefore the assumption of normality needed for the regression analysis can be said to be met.

**Table 4. Test of Heteroscedasticity**

Variable	Unstandardized B	Coefficients Std. Error	Standardized Coefficient Beta	t	Sig.
(Constant)	0.128	0.070		1.836	0.076
ROA	-0.011	0.036	-0.056	-0.301	0.765
DER	-0.059	0.042	-0.256	-1.383	0.177

Source: Authors' calculation using IBM SPSS Statistics

This study used the Glejser method to test for heteroscedasticity. The results show that all of the independent variables have significance values that are greater than 0.05. This means that the regression model does not have heteroscedasticity, which means that the variance of the residuals stays the same across all observations.

**Table 5. Test of Multicollinearity**

Variable	Tolerance	VIF
ROA	0,796	1,256
DER	0,779	1,283
ESG	0,803	1,245

Source: Authors' calculation using IBM SPSS Statistics

Multicollinearity was checked by looking at the tolerance and VIF values for each independent variable. The findings show that all variables meet the acceptable criteria, with tolerance values above 0.10 and VIF values below 10. This suggests that the independent variables are not highly correlated with one another, so multicollinearity is not a concern in this model.

**Table 6. Moderated Regression Analysis**

Variable	Coefficient ( $\beta$ )	Sig.	Notes
ROA	0.065	0.000	Positive and significant
DER	0.001	0.306	Not significant
ESG	1.146	0.000	Positive and significant
Interaction ROA×ESG	0.206	0.000	Positive and significant
Interaction DER×ESG	0.005	0.607	Not significant

Source: Authors' calculation using IBM SPSS Statistics

The Moderated Regression Analysis (MRA) was performed to investigate the moderating effect of ESG disclosure on the link between financial performance and stock prices. The findings indicate that profitability (ROA) exerts a positive and substantial influence on stock prices ( $\beta =$

0.065;  $p = 0.000$ ), whereas leverage (DER) does not demonstrate a significant impact ( $\beta = 0.001$ ;  $p = 0.306$ ). ESG disclosure has a substantial and favourable effect on stock prices ( $\beta = 1.146$ ;  $p = 0.000$ ). The interaction between ROA and ESG disclosures (ROA $\times$ ESG) is also favourable and significant ( $\beta = 0.206$ ;  $p = 0.000$ ). The interaction between DER and ESG disclosure (DER $\times$ ESG) is not significant ( $\beta = 0.005$ ;  $p = 0.607$ ).

### **How Profitability Affects Stock Prices**

The findings demonstrate that profitability, as represented by ROA, exerts a positive and significant influence on stock prices. This finding shows that a company's stock prices are higher when it can make more money from its assets. Profitability is a key metric for investors, as it shows how well a company uses its resources to make money. According to signaling theory, Investors can learn about the company's present situation and future prospects from its financial statements. Profitable businesses provide the market a favorable signal, showing that they are doing well and have stable earnings potential. This signal makes investors more confident, which leads to more demand for shares and, in the end, higher stock prices. This finding aligns with prior research, including (Rahayu & Adi, 2023) and (Salsabila et al., 2025), They also found that profitability had a big influence on stock prices. Consequently, this research substantiates the empirical evidence indicating that profitability is a crucial determinant in stock price formation.

### **How Leverage Affects Stock Prices**

The results show that stock prices are not greatly impacted by leverage as measured by the DER. This result implies that investors do not consider the amount of debt in a company's capital structure when making investment decisions in the basic materials industry. Signaling theory says that leverage shows financial risk. A higher DER means that a company is more dependent on outside financing and may be taking on more risk. But the results indicate that the market doesn't always see this information as a significant signal when setting stock prices. Investors might care more about how much money the company makes than how it obtains its money. In contrast to (Tannia & Suharti, 2020), found a substantial association between leverage and stock prices, this conclusion is consistent with (Muthmainna et al., 2023), found no such relationship. These differences suggest that the effect of leverage may differ based on industry traits and firm circumstances, indicating that certain industries may be more sensitive to leverage changes, while others may not be affected as significantly.

### **The Role of ESG Disclosure in Moderating the Link between Profitability and Stock Prices**

The findings demonstrate that ESG disclosure substantially influences the correlation between profitability and stock prices. This finding indicates that an elevated degree of ESG disclosure enhances the favorable impact of profitability on stock prices. Within the framework of signaling theory, ESG disclosure can be viewed as a non-financial signal that reflects a company's commitment to sustainable business practices and outstanding corporate governance. This information provides investors confidence that the company is not only doing well financially, but also taking into account environmental, social, and governance factors that will help it stay in business for a long time. Therefore businesses that are very profitable and have good ESG disclosure tend to receive more trust from investors. This finding is corroborated by (Nurnaningsih & Handajani, 2025), who identified a positive impact of ESG on stock returns. Therefore, ESG disclosure makes the good news about financial performance even better, which leads to higher stock prices.

### **The Role of ESG Disclosure in Moderating the Link between Leverage and Stock Prices**

The results show that ESG disclosure does not change the link between leverage and stock prices. This means that ESG disclosure can't change how leverage affects stock prices. Signalling theory posits that leverage may signify the financial risk associated with a company's capital structure. Still, the results indicate that this information is not the main thing that affects how investors see the value of a company. So, ESG disclosure doesn't really change the relationship between leverage and stock prices. Investors usually care more about how well a company is

doing, like how much money it makes, than how much debt it has. This result is in line with the findings of (Fajrin et al., 2025), who contend that social and governance issues neither mediate the link between financial variables and market performance nor consistently have a major impact on stock returns. Therefore, in this analysis, ESG disclosure is more crucial for strengthening the relationship between profitability and stock prices than for altering the relationship between leverage and stock prices.

## CONCLUSION

The findings demonstrate that stock prices are positively and significantly impacted by ROA, a measure of profitability. However, stock prices are not greatly impacted by the DER, a measure of leverage. These results imply that when evaluating stock value, investors give a company's ability to generate profits more weight than its capital structure. Furthermore, while it has no effect on the relationship between leverage and stock prices, Environmental, Social, and Governance (ESG) disclosure strengthens the relationship between profitability and stock prices. This means that ESG disclosure acts as a non-financial signal that makes investors more confident, especially when it is backed up by good financial results. Therefore, combining financial performance with sustainable practices is important for making a company more valuable and appealing to investors.

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