THE EFFECT OF ESG, PROFITABILITY, AND COMPANY SIZE ON CAPITAL STRUCTURE AND ITS IMPACT ON COMPANY VALUE

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Abstract

This study aims to analyze the influence of Environmental, Social, and Governance (ESG), profitability, and company size on capital structure and its impact on company value in the coal mining sector listed on the Indonesia Stock Exchange (IDX) during the period 2018–2024. This study uses a quantitative approach with the path analysis method to determine the direct and indirect effects between variables. Data were obtained from the annual reports and sustainability reports of ten companies selected through purposive sampling techniques. The results of the study indicate that profitability has a negative and significant effect on capital structure, while ESG and company size do not have a significant effect. Furthermore, profitability and company size have a significant effect on company value, while ESG and capital structure do not have a significant effect. The mediation test with the Sobel Test shows that capital structure does not mediate the effect of ESG, profitability, and company size on company value. This finding indicates that profitability is the main factor that directly influences company value, and capital structure is not an effective intermediary channel in the relationship between these variables.

Keywords: ESG, Profitability, Company Size, Capital Structure, Company Value, Path Analysis

INTRODUCTION

The coal mining sector in Indonesia continues to show quite good performance despite facing global economic challenges. Coal prices, although experiencing some fluctuations, remain at a level that is profitable for coal mining companies. In May 2023, coal prices were recorded at around US$ 160 per ton. This price, although lower than the previous peak, is still relatively high when compared to historical prices, providing benefits for companies operating in this sector (IDX Channel, 2023). The performance of stocks in the coal sector also reflects this positive trend. Several large companies such as PT Bukit Asam (PTBA), PT Adaro Energy Indonesia (ADRO), and PT Bumi Resources (BUMI) experienced significant increases in their stock prices. For example, in March 2022, Golden Eagle Energy (SMMT) shares increased by 10.10% to IDR 1,090 per unit. At the same time, PT Bumi Resources (BUMI) also increased by 3.39% to IDR 61 per unit, PT Adaro Energy Indonesia (ADRO) increased by 3.31% to IDR 2,810 per unit, and PT Bukit Asam (PTBA) increased by 2.80% to IDR 3,310 per unit. This performance shows positive sentiment towards the coal sector despite the uncertainty of global commodity prices (PwC, 2021).

Corporate value plays an important role in the coal mining sector, as it reflects market perceptions of a company's performance and future prospects (Sari et al., 2025). This industry faces high risks such as commodity price volatility, large capital requirements, and significant environmental challenges. High corporate value can attract investors because it is considered to reflect financial stability and good profit prospects, making it an important indicator in making investment decisions. In addition, companies with high value tend to have better access to lower-cost financing sources, due to the lower investment risk. This is vital for the coal industry, which requires large capital for its development and operations (Gherghina, 2024; Chen et al., 2023). The value of companies in the coal mining sector is currently heavily influenced by global market conditions, government policies, and increasing attention to environmental sustainability. Fluctuations in international coal prices are a major factor affecting company value, especially since demand from major countries such as China and India is still quite high, despite efforts to diversify energy to cleaner sources. However, pressure from carbon emission reduction policies and domestic regulations in various countries pose significant challenges. Governments in coal-producing countries, including Indonesia, continue to review export and environmental policies aimed at balancing the economic benefits of coal with environmental responsibilities, which directly affect the valuation of coal companies.

Research by Lusiyanti & Setijaningsih (2023) highlights that business risk and asset structure affect capital structure, while profitability can strengthen the influence of company growth. Ignatia & Setijaningsih (2024) found that capital structure and company growth affect company value, although company size does not. Meanwhile, Lo & Setijaningsih (2024) emphasized the important role of profitability in increasing company value, but solvency and institutional ownership did not show a significant influence. Research by Vonnicia & Setijaningsih (2024) shows that profitability and liquidity have a significant impact on capital structure in the mining sector, which is relevant to the focus of this study. Cuana & Setijaningsih (2020) concluded that profitability and company size have a significant effect on company value, while liquidity and managerial ownership have no effect.

The coal mining sector in Indonesia has shown strong performance despite uncertain global pressures. This condition is interesting because on the one hand the coal industry is still the backbone of energy and a source of national income, but on the other hand, it is faced with great pressure related to sustainability and environmental responsibility. Given the importance of company value as a reflection of market perception of long-term performance and prospects, as well as the increasing urgency of factors such as ESG (Environmental, Social, and Governance), profitability, and capital structure in determining company valuation, this topic becomes very relevant and crucial to study.

REVIEW OF LITERATURE

Environmental, Social, Governance, and Capital Structure

Environmental, Social, and Governance (ESG) is a framework used to evaluate the extent to which a company contributes to sustainability and positive impacts through environmental, social, and governance policies. The ESG framework not only covers a company's compliance with environmental regulations, such as waste management and carbon emissions, but also addresses social issues, such as workers' rights, community welfare, and transparency in corporate governance. ESG measures the extent to which a company carries out responsible and sustainable business practices, which also include aspects of energy efficiency and human rights protection in daily operations (Friede et al., 2018; Velte, 2021). ESG measurement methods involve a combination of quantitative and qualitative assessments covering environmental aspects, such as waste management and renewable energy use; social aspects, including employee welfare and occupational safety policies; and governance aspects, such as board structure, diversity, and transparency in decision-making. In practice, these assessments are often measured through specific indicators that allow comparisons between companies, both within the same sector and across sectors. For example, for governance aspects, indicators may include the proportion of independent directors on the board or the existence of an effective audit committee (Kim & Li, 2021; Rahman & Nguyen, 2024). Companies with strong ESG disclosure typically enjoy a lower cost of capital, due to lower perceived risk by lenders and investors. Research shows that investors view ESG disclosure as an indicator of management quality and a company’s commitment to responsible business practices. Companies with good ESG practices are often perceived as more credible and have a better reputation, which increases their attractiveness to investors.

Profitability and Capital Structure

Profitability is the ability of a company to generate profits from its operational activities, which shows the efficiency of the company in managing its assets and liabilities to achieve profits. Profitability is a key performance indicator that measures how effectively a company utilizes its resources to create economic value. According to Al-Matari et al. (2019), profitability is a determining factor in a company's success, because the ability to generate profits is directly correlated with the company's resilience and growth. The profits generated not only reflect the results of sales, but also how well the company controls costs and manages its assets. This efficiency is very important in maintaining the company's liquidity and sustainability, especially in highly competitive and dynamic industries (Ahmed et al., 2020; Riaz et al., 2023). Profitability is measured through key financial ratios such as

Return on Assets (ROA), Return on Equity (ROE), and Net Profit Margin (NPM). ROA, which measures net income to total assets, indicates the efficiency of asset use to generate profits (Singh & Gaur, 2018; Tandon & Malhotra, 2020). ROE evaluates the return on shareholder investment, reflecting the company's ability to manage its own capital to generate profits (Ahmed et al., 2020; Riaz et al., 2023). Meanwhile, NPM shows the percentage of net profit from total sales, illustrating the company's effectiveness in controlling operating costs and maintaining profit margins (Majumdar & Sen, 2022; Sur, 2021).

Company Size and Capital Structure

Company size is an indicator that reflects how big or small a company is, usually measured by total assets, revenue, or number of employees. This measure provides an overview of the company's operational capacity and financial strength to handle large projects, adapt to economic changes, and handle market fluctuations. Larger companies usually have more extensive resources, which allows them to undertake complex projects and take advantage of economies of scale. They tend to have better access to capital markets, as they are considered more stable and able to offer safer rates of return to investors. Thus, company size is often directly related to competitiveness in the market and the ability to survive in the long term (Nguyen et al., 2020; Al-Najjar & Clark, 2019). Company size can be measured through indicators such as total assets, total revenue, and number of employees, each of which provides a perspective on the scale and capacity of the company. Total assets are often used in research to describe a company's capacity to manage its resources (Ali & Ma, 2021; Al-Najjar, 2019). Total revenue measures a company's ability to generate revenue and indicates its influence in the market (Vo, 2020; Nguyen et al., 2020). Company size has a significant effect on the capital structure of coal mining companies on the Indonesia Stock Exchange.

Capital Structure

Capital structure refers to the combination of debt and equity that a company uses to finance its assets and run its operations. The choice of capital structure has important implications for the company's financial stability, as well as its ability to manage and face risks. The composition of debt and equity not only determines the level of the cost of capital but also affects how well the company can survive in uncertain financial situations. Companies that choose a higher proportion of debt may enjoy tax benefits from debt interest, but also face greater risks if the company's cash flow is unstable. Conversely, companies with a larger proportion of equity may experience higher capital cost pressures but have a better capacity to withstand market fluctuations without heavy interest burdens (Myers, 1984; Nguyen & Tran, 2021). The company's capital structure is measured using financial ratios such as Debt-to-Equity Ratio (DER) and debt to total assets ratio, which indicate the company's dependence on debt compared to equity. DER reflects the proportion of debt to equity in the company's financing and indicates financial risk, because a high DER means a greater debt burden (Serrasqueiro & Caetano, 2018; Goyal & Park, 2020). Meanwhile, the debt to total assets ratio shows the proportion of assets financed by debt, which if high indicates a large dependence on debt, increasing liquidity and interest rate risks (Nguyen & Tran, 2021; Rahman et al., 2023).

Company Values

Corporate value is a comprehensive measure that reflects the market's perception of the overall economic value of a company. This value refers not only to the company's assets or income, but also to how the market assesses the future prospects, risks, and potential returns offered to shareholders. Corporate value is an important indicator that shows the company's success in maximizing profits for its shareholders. The higher the company's value, the greater its appeal in the eyes of investors, because this indicates that the company is able to create sustainable value and manage its resources efficiently (Ahmed & Malik, 2019; Rahman & Nguyen, 2024). Firm value is often measured using the Tobin's Q ratio, which compares the market value to the replacement value of a firm's assets. This ratio indicates the efficiency of a firm in managing assets to create value in excess of the replacement cost of those assets. A Tobin's Q above 1 indicates that the market values the firm higher than its assets, reflecting positive growth prospects (Serrasqueiro & Caetano, 2018; Vo, 2020). In addition, the price-to-earnings (P/E) and price-to-book (P/B) ratios are also often used. The P/E ratio reflects the market's expectations for earnings growth, while the P/B reflects the firm's ability to create more value from its net assets (Kim et al., 2021; Goyal & Park, 2020). The combination of Tobin's Q, P/E, and P/B provides a comprehensive analysis of firm value, helping investors make more strategic decisions (Vo, 2020; Zhang et al., 2023).

Hypothesis Development

The Influence of Environmental, Social, and Governance on Capital Structure

The impact of Environmental, Social, and Governance (ESG) performance on the capital structure of coal mining companies on the Indonesia Stock Exchange is increasingly becoming an important concern. With increasing awareness of environmental sustainability and social responsibility, companies that pay attention to ESG aspects tend to attract more investors who care about sustainable business practices. On the other hand, companies that fail to meet ESG standards may face reputational risks and potential decreased access to funding sources. Environmental, Social, and Governance (ESG) has a significant influence on a company's capital structure. Studies show that companies that actively disclose their ESG performance tend to have a more stable capital structure and lower leverage compared to companies that are less open in ESG disclosure. This is because good ESG disclosure is often associated with lower capital costs, wider access to equity markets, and higher trust from investors.

H_1. *Environmental, social and governance have a positive influence on capital structure*

The Influence of Profitability on Capital Structure

Profitability has a significant influence on the capital structure of coal mining companies on the Indonesia Stock Exchange. Companies with high profitability tend to have easier access to external financing, such as debt, because they are considered able to repay loans smoothly. In addition, more profitable companies often prefer to fund their investments through retained earnings rather than taking on new debt, in order to avoid high interest expenses and financial risks. Profitability is an important factor that influences a company's capital structure. Research shows that companies with high levels of profitability tend to have lower leverage. This is because more profitable companies are usually able to fund their operations through retained earnings rather than relying on external debt. The use of retained earnings allows companies to reduce their dependence on debt and maintain a more stable

capital structure, which in turn can increase financial flexibility and reduce the risk of bankruptcy. In other words, more profitable companies often have a greater ability to fund growth and expansion through internal funding, which helps them reduce interest costs and debt pressures (Tanjung, 2023; Myers & Majluf, 2019; Bhuiyan & Nguyen, 2021).

H_2. *Profitability has a positive influence on capital structure*

The Influence of Company Size on Capital Structure

Company size has a significant effect on the capital structure of coal mining companies on the Indonesia Stock Exchange. Companies with larger sizes generally have easier and wider access to various sources of funding, both through equity and debt. Large companies are generally considered more stable and have lower risks than small companies, so they can obtain loans with lower interest rates and more favorable terms. Firm size has a significant impact on capital structure, as larger firms tend to have easier and broader access to various sources of funding. This access allows large firms to take advantage of higher leverage at a lower cost of capital. Large firms often have good reputations and stable financial records, so they can obtain debt at lower interest rates than smaller firms. This is because lenders and investors view large firms as more stable and less risky entities, making them more attractive to finance (Ademi & Klungseth, 2022; Hoepner et al., 2021).

H_3. *Company size has a positive influence on capital structure*

The Influence of Environmental, Social, and Governance on Company Value

Environmental, Social, and Governance (ESG) performance has a significant influence on the value of coal mining companies on the Indonesia Stock Exchange. Currently, investors are increasingly considering ESG factors as an important indicator in assessing a company's sustainability and long-term risk. Mining companies that have good ESG performance tend to be viewed more positively by the market, which can increase the company's value because it is considered more responsible and sustainable in its operations (Sari & Johan, 2024). Strong Environmental, Social, and Governance (ESG) practices are often positively correlated with increased company value. Good ESG strengthens a company's reputation and increases its attractiveness to investors, which in turn can increase the company's market value as measured by the Tobin's Q ratio. When companies successfully implement effective ESG practices, they tend to be viewed as more socially and environmentally responsible.

H_4. *Environmental, social, and governance on company values have a positive influence on company values.*

The Influence of Profitability on Company Value

Profitability plays an important role in influencing the value of coal mining companies on the Indonesia Stock Exchange. Companies that record high levels of profitability are generally considered more attractive by investors, because their ability to generate stable profits reflects good performance and the potential for higher returns on investment. Strong profitability can also increase investor confidence in the company's long-term prospects, thereby contributing to an increase in the company's value in the market. High profitability allows companies to reinvest in product development, market expansion, and operational efficiency improvements. This increases the company's competitiveness and provides greater added value to shareholders. High ROA also indicates that the company has a good strategy in utilizing existing assets, which in turn increases investor confidence and

increases Tobin's Q as a reflection of the company's value in the market (Ademi & Klungseth, 2022; Cook & Tang, 2020; Zhang et al., 2024).

H_5. *Profitability has a positive influence on company value*

The Influence of Company Size on Company Value

Company size has a significant influence on the value of coal mining companies on the Indonesia Stock Exchange. Companies with larger sizes are generally viewed as more stable and less risky by investors, as they typically have broader resources, stronger cash flows, and better access to capital and markets. This makes large companies more able to survive fluctuating market conditions, which often occur in the coal mining industry. The greater reputation of large companies also increases investor confidence. This reputation not only increases the company's attractiveness in the capital market but also provides easy access to obtain capital at a lower cost. Large companies are generally considered to be more resilient in the face of economic challenges or intense competition. With a stronger reputation, they often receive higher valuations from the market, which is reflected in the increase in company value. This makes large companies more attractive to investors seeking long-term stability and growth (Pijourlet, 2021; Zhang et al., 2023).

H_6. *Company Size has a positive influence on company value*

The Influence of Capital Structure on Company Value

Capital structure has a significant effect on the value of coal mining companies listed on the Indonesia Stock Exchange. Companies that use an optimal capital structure, namely with a balanced proportion of debt and equity, tend to be able to increase the value of the company. This is due to the ability of an effective capital structure to minimize capital costs and maximize returns for shareholders. An optimal capital structure can increase firm value by taking advantage of the tax savings benefits of debt. The use of debt allows firms to take advantage of tax deductions on interest expenses, which can indirectly reduce the firm's tax burden. This can increase the firm's net cash flow and, ultimately, increase the firm's value in the eyes of investors due to the lower cost of capital. Firms with an optimal capital structure can benefit from economies of scale and greater financial flexibility, which gives them the capacity to make strategic investments that increase firm value (Chen et al., 2023; Zhang et al., 2024).

H_7. *Capital structure has a positive and significant effect on company value*

RESEARCH METHOD

This research design uses a quantitative approach with an explanatory research type to test the causal relationship between ESG variables, profitability, and company size on company value, with capital structure as a mediating variable. The data used are secondary data obtained from annual reports, sustainability reports, and financial reports of coal mining companies listed on the Indonesia Stock Exchange (IDX) during the observation period. Data analysis was carried out using multiple linear regression methods and path analysis to measure the direct and indirect effects between variables. Data processing was carried out with the help of statistical software such as SPSS, and was equipped with classical assumption tests including normality, multicollinearity, and heteroscedasticity tests to ensure the validity of the regression model used. The population in this study is all coal mining companies listed on the Indonesia Stock Exchange (IDX). This sector was chosen because it has special characteristics related to high environmental, social, and governance risks, so that

the variables Environmental, Social, and Governance (ESG), profitability, company size, and capital structure are important factors in determining company value. This study uses a purposive sampling technique, which is a sample selection technique based on certain criteria that are relevant to the research objectives. The sample selection criteria are as follows:
The company must be consistently listed on the IDX during the period 2018 to 2024
The company must have complete financial report data and sustainability reports (ESG) during that period.
The company has complete information related to the research variables: ROA (profitability), log total assets (company size), DER (capital structure), and Tobin's Q (company value).

Based on these criteria, 10 coal mining companies were selected as research samples, namely:

Table 1.
Criteria Sample

1. PT Bukit Asam Tbk (PTBA)
2. PT Adaro Energy Indonesia Tbk (ADRO)
3. PT Bumi Resources Tbk (BUMI)
4. PT Indika Energy Tbk (INDY)
5. PT Harum Energy Tbk (HRUM)
6. PT Indo Tambangraya Megah Tbk (ITMG)
7. PT Bayan Resources Tbk (BYAN)
8. PT Toba Bara Sejahtra Tbk (TOBA)
9. PT Golden Energy Mines Tbk (GEMS)
10. PT Delta Dunia Makmur Tbk (DOID)

RESULTS AND DISCUSSION

Path Analysis

Path analysis is used in this study to test the causal relationship between the variables studied, both directly and indirectly. The purpose of this analysis is to determine how much influence the independent variables, namely X1 (ESG), X2 (Profitability/ROA), and X3 (Company Size) have on the mediating variable Z (Capital Structure), as well as the direct influence of the three variables along with Z on the dependent variable Y (Company Value). The analysis was carried out in two stages: first, testing the influence of X1, X2, and X3 on Z; and second, testing the influence of X1, X2, X3, and Z on Y, to see the mediating role of capital structure in the relationship between these variables.

The Influence of ESG, Profitability, and Company Size on Capital Structure

Table 1 presents the results of the first stage multiple linear regression analysis in the path analysis model, which aims to see the influence of independent variables, namely X1 (ESG), X2 (Profitability/ROA), and X3 (Company Size), on the mediation variable Z (Capital Structure). This analysis was conducted to determine the contribution of each independent variable to the company's capital structure, both simultaneously and partially, based on the regression coefficient value, significance value (Sig.), and t-count value.

Table 2.
Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.273	1.276		.997	.322
	ESG	.004	.002	.121	1.618	.111
	Profitability	-.133	.012	-.855	-11.390	.000
	Company Size	.026	.115	.016	.222	.825

Source: Data processed (2025)

Based on the results of the regression analysis in Table 4.10, the multiple linear regression equation is obtained as follows: $Z = 1.273 + 0.004X_1 – 0.133X_2 + 0.026X_3$ from this equation it can be seen that:

X1 (ESG) has a positive coefficient of 0.004 which means that in theory ESG has a positive effect on capital structure, but based on the partial test of the Sig. value = 0.111 (> 0.05), the effect is not significant.

X2 (Profitability) has a negative coefficient of -0.133 and a significance value of 0.000 (< 0.05), indicating that profitability has a negative and significant effect on capital structure. This means that the higher the profitability, the lower the company's dependence on debt.

X3 (Company Size) has a positive coefficient of 0.026 with a significance value of 0.825 (> 0.05), indicating that its effect on capital structure is not significant.

Partially, only profitability variables are proven to have a significant effect on capital structure, while ESG and company size do not have a significant effect in this model. This finding suggests that companies with high profitability tend to use less debt, which is in line with the pecking order theory in capital structure.

Table 3.
Model Summary Influence X_1, X_2, X_3 on Z

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.822[a]	.675	.660	.32243	1.913

a. Predictors: (Constant), company size, profitability, ESG
b. Dependent Variable: capital structure

Source: Data processed (2025)

The Adjusted R Square value of 0.660 indicates the level of accuracy of the model after being adjusted for the number of independent variables, which still indicates a good model. In addition, the Durbin-Watson value of 1.913 is within the normal range (1.5 to 2.5), which indicates that there is no autocorrelation in the residuals of this regression model. Thus, this regression model can be said to be feasible and valid for measuring the influence of ESG, profitability, and company size on capital structure. Table 4.12 presents the results of the ANOVA (Analysis of Variance) test to test the simultaneous influence between independent variables X1 (ESG), X2 (Profitability), and X3 (Company Size) on the mediation variable Z (Capital Structure). This ANOVA test is used to see whether the regression model built as a whole is significant or not, by looking at the F-count value and significance value (Sig.).

These results are the basis for concluding whether the three independent variables together have an effect on capital structure.

Table 4.
ANOVA Influence X_1, X_2, X_3 on Z

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14.246	3	4.749	45.675	.000[b]
	Residual	6.862	66	.104		
	Total	21.107	69			

a. Dependent Variable: capital structure
b. Predictors: (Constant), company size, profitability, ESG
Source: Data processed (2025)

Based on the results of the ANOVA test in Table 4.12, the F-count value is 45.675 with a significance value (Sig.) of 0.000. Because the significance value is less than 0.05, it can be concluded that the regression model is simultaneously significant. This means that the three independent variables, namely ESG, profitability, and company size together have a significant effect on capital structure. These results indicate that although not all variables have a partial effect, collectively all three are able to explain the variations that occur in the company's capital structure. Thus, the regression model used in this stage is valid for use in further path analysis.

The Influence of ESG, Profitability, and Company Size on Company Value

Table 4.13 shows the results of the second stage multiple linear regression analysis in the path analysis model, which aims to test the influence of independent variables X1 (ESG), X2 (Profitability/ROA), X3 (Company Size), and mediating variable Z (Capital Structure) on the dependent variable Y (Company Value). This analysis is conducted to determine the direct influence of each variable on company value and to identify which variables significantly affect the increase or decrease in the company's market value.

Table 5.
Multiple linear regression

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.418	.390		3.634	.001
	ESG	.000	.001	.031	.446	.657
	Profitability	.041	.006	.779	6.733	.000
	Company size	-.080	.035	-.145	-2.295	.025
	Capital structure	-.022	.037	-.064	-.584	.561

Source: Data processed (2025)

From the regression results above, the multiple linear regression equation is obtained as follows: $Y = 1.418 + 0.000X_1 + 0.041X_2 – 0.080X_3 – 0.022Z$ Based on these results:

X1 (ESG) has a coefficient of 0.000 with a significance value of 0.657 (> 0.05), which means it does not have a significant effect on company value.

X2 (Profitability) has a positive coefficient of 0.041 and a significance value of 0.000 (< 0.05), indicating that profitability has a positive and significant effect on company value. This means that the higher the level of profitability, the greater the value of the company.
X3 (Company Size) has a negative coefficient of -0.080 and a significance value of 0.025 (< 0.05), which means that company size has a negative and significant effect on company value. This indicates that larger companies do not always get higher market valuations.
Z (Capital Structure) has a negative coefficient of -0.022 with a significance value of 0.561 (> 0.05), which means that there is no significant effect of capital structure on company value in this model.

Partially, only profitability and company size are proven to have a significant effect on company value. Meanwhile, ESG and capital structure do not show a significant direct effect, so in this path model, the main contribution to increasing company value comes from profitability, with company size being a variable that is also relevant but has a negative direction.

ANOVA Influence X_1, X_2, X_3, Z on Y

Table 6.
Anova

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.802	4	.451	47.065	.000[b]
	Residual	.622	65	.010		
	Total	2.424	69			

a. Dependent Variable: Company value
b. Predictors: (Constant), Capital Structure, Company Size, ESG, Profitability
Source: Data processed (2025)

Sobel Test

Table 6.
Sobel Test

Input:			Test statistic:	Std. Error:	*p*-value:
a	0.004	Sobel test:	-0.56994054	0.0001544	0.56871803
b	-0.022	Aroian test:	-0.51396118	0.00017122	0.60727913
s_a	0.002	Goodman test:	-0.64938018	0.00013551	0.51609267
s_b	0.037	Reset all	Calculate		

Based on the results in Table 6, all mediation test methods (Sobel, Aroian, and Goodman) show p-values above 0.05, respectively 0.5687; 0.6073; and 0.5161. This indicates that capital structure does not significantly mediate the effect of ESG on firm value. In other words, although ESG may theoretically affect firm value through capital structure management, the results of this test indicate that the mediation effect is not statistically significant. In addition, the relatively small and negative test statistic value also strengthens

that the indirect effect through the capital structure mediation pathway does not provide a significant contribution to the relationship between ESG and firm value.

Table 7.
Sobel Test

Input:			Test statistic:	Std. Error:	*p*-value:
a	-0.133	Sobel test:	0.5937408	0.00492808	0.55268549
b	-0.022	Aroian test:	0.59134558	0.00494804	0.5542889
s_a	0.012	Goodman test:	0.59616535	0.00490803	0.55106477
s_b	0.037	Reset all	Calculate		

Based on the results shown in Table 7, all p-values of the three test methods are above 0.05, namely 0.5527 for the Sobel Test, 0.5543 for Aroian, and 0.5511 for Goodman. This indicates that capital structure does not have a significant mediating role in the relationship between profitability and firm value.

Table 8.
Sobel Test

Input:			Test statistic:	Std. Error:	*p*-value:
a	0.026	Sobel test:	-0.21132573	0.00270672	0.83263311
b	-0.022	Aroian test:	-0.11342562	0.00504295	0.90969313
s_a	0.115	Goodman test:	NaN	NaN	NaN
s_b	0.037	Reset all	Calculate		

Based on the results in Table 4.18, both the Sobel Test and the Aroian Test produce very high p-values, of 0.8326 and 0.9097, respectively. These values are far above the significance limit of 0.05, indicating that capital structure does not significantly mediate the effect of firm size on firm value. In addition, the Goodman Test results cannot be calculated (NaN), possibly due to inconsistencies in the data or non-fulfillment of the calculation requirements. Thus, it can be concluded that the relationship between firm size and firm value occurs directly, and capital structure does not play a significant intermediary role in the relationship.

Discussion

This study attempts to examine the influence of ESG, profitability, company size on capital structure and its impact on company value. The results of the study indicate that, The influence of Environmental, Social, and Governance on capital structure in coal mining companies reflects the dynamics between social responsibility and corporate financing strategies. Companies that have good ESG performance are often associated with a reliable management image and responsible governance practices, which in turn enhances their reputation in the eyes of stakeholders (Chen et al., 2023; Adegbite et al., 2019). This makes ESG one of the important signals considered in making long-term investment decisions. Furthermore, this study also found the influence of profitability on capital structure. The results show that profitability has a significant role in shaping the company's capital structure, especially in the coal mining sector listed on the Indonesia Stock Exchange. Companies that have high profit levels tend to use retained earnings to finance operational and investment activities, rather than using debt which can incur interest expenses and increase financial risk.

Tanjung (2023) emphasized that companies with high profitability are more likely to maintain a stable capital structure through internal funding because they are able to reduce capital costs and avoid pressure from external obligations.

Firm size shows a strong theoretical relationship to capital structure, but the results of this study show that the effect of firm size on capital structure is not statistically significant. A positive regression coefficient indicates a tendency that the larger the firm size, the higher the possibility of increasing leverage, but a high significance value reflects that this effect cannot be empirically proven in the sample analyzed. Large-scale firms also tend to have more and more valuable assets, which can be used as collateral in obtaining loans. The availability of these fixed assets supports flexibility in financing and provides additional guarantees for lenders. Chen et al. (2024), Miranda (2023), and Zhang et al. (2024) show that these characteristics allow large firms to use leverage efficiently to fund expansion, increase productivity, and expand business networks.

Finally, the results of the study indicate that capital structure affects the value of the company. The results of this study state that the capital structure in this study shows an insignificant negative effect on the value of the company, which indicates that the proportion of debt and equity used by coal mining companies has not made a significant contribution to increasing the value of the company in the eyes of the market. Companies in this industry often face high pressure due to commodity price volatility and high operating costs. Although theoretically an optimal capital structure can increase the value of the company through tax savings from the use of debt and efficiency of capital costs, empirical results show that in many cases, the funding structure is not always the main determinant that influences the market's assessment of the company. The results of the analysis using the Sobel Test in this study provide an illustration that capital structure does not have a significant role as a mediator in the relationship between ESG, profitability, and company size on company value. This test is conducted to identify whether the indirect effect of the independent variable to the dependent variable through capital structure has a significance value that meets statistical requirements.

CONCLUSION

Based on the results of multiple regression statistical analysis and mediation test, the findings obtained are, ESG variables do not have a significant effect on the company's capital structure. Although ESG is often associated with lower risk perception and higher investor confidence, this study did not find a significant relationship between ESG and the company's funding structure decisions. Profitability has a negative and significant effect on capital structure, which means that companies with high levels of profitability tend to use less debt in their capital structure. Company size does not have a significant effect on capital structure. Large companies do not always have a significantly different capital structure than small companies in the coal mining sector. This may be due to other factors such as risk management, company policies, or industry conditions that affect capital structure more than size itself. ESG does not have a significant effect on company value, indicating that ESG practices have not become a major factor influencing market perceptions of company value. Although ESG is theoretically important in building reputation and reducing risk, its effect on company value has not been seen clearly in the empirical data of this study. Companies with high levels of profit tend to be valued higher by the market because they are considered

more efficient in managing assets and providing attractive returns for investors. Profitability is the main indicator in assessing a company's performance and future prospects. Company size has a negative and significant effect on company value. Larger companies do not always get higher market valuations.

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