MIKAILALSYS
Journal of Multidisciplinary Sciences

e-ISSN : 2987-2286
p-ISSN : 2987-3924

Index: Harvard, Boston, Sydney, Copernicus, Sinta 4, Scilit, Semantic, Google, etc

https://doi.org/10.58578/mikailalsys.v4i2.10797

The Effect of Capital Structure, Leverage, and Firm Size on Financial Performance of Basic Materials Sector Companies Listed on the Indonesia Stock Exchange

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Article Info:

Submitted:	Revised:	Accepted:	Published:
May 8, 2026	Jun 5, 2026	Jun 17, 2026	Jun 22, 2026

Abstract

Financial performance is a critical indicator of a company's ability to manage resources effectively and achieve sustainable business objectives. In the basic materials sector, companies face challenges related to commodity price fluctuations, economic uncertainty, and post-pandemic pressures that may affect their financial performance. This study aimed to examine the effects of capital structure, leverage, and firm size on the financial performance of basic materials companies listed on the Indonesia Stock Exchange during the 2019–2024 period. A quantitative approach was employed using secondary data obtained from companies' annual financial statements. The sample consisted of 24 companies selected through purposive sampling. Data were analyzed using panel data regression with the Fixed Effect Model (FEM). The findings reveal that capital structure, measured by the Debt to Equity Ratio (DER), has a negative and significant effect on financial performance. Leverage, measured by the Debt to Assets Ratio (DAR), has a positive and significant effect on financial performance, whereas firm size does not have a significant effect. The study concludes that financing structure and debt management are more decisive in

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shaping financial performance than organizational scale. These findings contribute to corporate finance literature by providing sector-specific evidence on the determinants of financial performance in Indonesia's basic materials sector. Practically, the study implies that companies should formulate optimal financing policies and allocate debt productively to enhance profitability and support long-term business sustainability.

Keywords: Capital Structure; Leverage; Firm Size; Financial Performance; Basic Materials Sector

INTRODUCTION

The increasingly competitive business environment requires companies to maintain sustainable performance through effective financial management practices. Economic instability and market uncertainty significantly affect corporate performance, particularly in sectors dependent on industrial demand and global economic conditions (Febiola & Susanti, 2024). Financial performance is commonly used to evaluate a company's effectiveness in managing assets, liabilities, and profitability to achieve organizational objectives (Rahmansyah & Helliana, 2023). Strong financial performance reflects managerial effectiveness and supports business sustainability in a competitive environment (Satriawibawa & Sitinjak, 2024). Financial performance also serves as an important source of information for investors in assessing business prospects and financial risks (Syarofi, 2016). The basic materials sector plays a strategic role in supporting industrial activities and national economic development because it provides essential raw materials for infrastructure and manufacturing industries (Yuliani et al., 2025). This sector includes mining, cement, chemical, and metal industries that contribute significantly to economic growth (Riyadi & Winingrum, 2024). However, firms in this sector are highly vulnerable to commodity price fluctuations, inflationary pressure, and disruptions in global trade (World Bank, 2025). During the COVID-19 pandemic and post-pandemic recovery period, many companies in the sector experienced declining profitability due to weakened industrial demand and increasing production costs (Adventy, 2024). Similar pressures were also observed globally, where commodity-based firms experienced declining earnings due to lower market demand and price instability (Reuters, 2024).

Financial performance is influenced by several internal factors, including capital structure, leverage, and firm size (Amalia & Khuzaini, 2021). Capital structure reflects the

proportion of debt and equity used to finance corporate operations and investments (Gunawan et al., 2022). Appropriate financing decisions are expected to improve operational efficiency and increase profitability (Kusniawati & Amin, 2024). Companies with an effective financing composition are generally more capable of maintaining financial stability and competitiveness (Lestari & Effriyanti, 2024). However, previous findings concerning the relationship between capital structure and financial performance remain inconsistent. Some studies indicate a positive and significant effect because debt financing may improve investment capacity and profitability (Sembiring et al., 2024). Conversely, other studies reveal negative effects due to financial burdens and increasing debt obligations (Febiola & Susanti, 2024). Additional evidence also suggests that capital structure may negatively affect firm performance when debt levels exceed optimal capacity (Le & Phan, 2017). Similar findings are reported in other international studies highlighting the negative consequences of excessive debt financing (Tesema, 2024). Leverage is another important factor frequently associated with financial performance because it reflects the extent to which firms depend on external financing (Makhdalena, 2014). Proper leverage management may improve profitability by increasing firms' ability to expand operational activities (Maharani & Hanah, 2023). However, excessive debt usage may expose firms to financial distress and reduce profit sustainability (Anandayama & Suwardi, 2021). Some empirical studies report a positive influence of leverage on financial performance due to efficient debt utilization (Safira et al., 2025). Nevertheless, other studies reveal negative effects because increasing debt obligations may weaken financial performance (Rizky et al., 2024). Similar findings are also reported in mining and manufacturing industries, where leverage increases financial risk and operational pressure (Hasti et al., 2022).

Firm size is also considered an important determinant of financial performance because larger firms generally possess stronger financial capacity and broader access to resources (Diana & Osesoga, 2020). Companies with larger total assets are often assumed to have stronger operational capabilities and financing flexibility (Mudjijah et al., 2019). Large firms may also benefit from economies of scale and wider market access (Purwanti, 2021). Nevertheless, firm size does not always guarantee better financial performance because operational complexity and managerial inefficiency may reduce effectiveness (Rambe, 2020). Previous studies show inconsistent findings regarding firm size, where some studies report positive and significant effects on financial performance (Ad'hani et al., 2024). In contrast, other findings reveal insignificant effects, suggesting that larger size alone is insufficient to

improve firm performance (Afridayani & Putren, 2025). Similar inconsistencies are also observed in studies examining firm size and financial sustainability across industries (Sharfina et al., 2023). Based on these contradictory findings, the *research gap* of this study lies in the inconsistency of empirical evidence concerning the effects of capital structure, leverage, and firm size on financial performance (Amalia & Khuzaini, 2021). Existing studies also tend to focus on manufacturing or mining sectors with different periods of observation (Fajar et al., 2025). Limited studies specifically investigate the simultaneous effect of these variables within Indonesian basic materials companies during the 2019–2024 period, despite the sector facing post-pandemic economic pressure and commodity fluctuations (Yuliani et al., 2025).

The *novelty* of this study lies in its focus on basic materials companies listed on the Indonesia Stock Exchange during 2019–2024 and its integration of capital structure, leverage, and firm size as determinants of financial performance. This study adopts Pecking Order Theory, Trade-Off Theory, and Agency Theory to explain the relationship between financing decisions, debt use, and corporate resource management on financial performance. Pecking Order Theory explains corporate preferences in choosing funding sources (Myers & Majluf, 1984), Trade-Off Theory explains the balance between the benefits and costs of debt use (Kraus & Litzenberger, 1973), while Agency Theory explains the relationship between owners and management in managing corporate resources to improve financial performance (Jensen & Meckling, 1976). Positive financial performance may strengthen investor confidence, whereas poor performance may weaken market perceptions (Fachrurrozi et al., 2024). Therefore, this study aims to analyze the effects of capital structure, leverage, and firm size on the financial performance of basic materials companies listed on the Indonesia Stock Exchange during 2019–2024. The findings are expected to contribute to financial management literature and provide practical implications for investors and company management in making financial decisions.

METHODS

This study employed a quantitative approach with an explanatory research design to examine the effects of capital structure, leverage, and firm size on the financial performance of basic materials companies listed on the Indonesia Stock Exchange (IDX). A quantitative approach was applied because the study relied on numerical data analyzed statistically to test relationships among research variables and evaluate the proposed hypotheses (Sugiyono,

2019). The study focused on financial performance as the dependent variable, while capital structure, leverage, and firm size were treated as independent variables. Financial performance was measured using *Return on Assets* (ROA), which reflects a company's ability to generate profit through the effective utilization of total assets (Rahmansyah & Helliana, 2023). Capital structure was measured using the *Debt to Equity Ratio* (DER), which indicates the proportion of debt relative to equity in corporate financing (Sari et al., 2023). Leverage was measured using the *Debt to Assets Ratio* (DAR), representing the extent to which company assets are financed through debt (Makhdalena, 2014). Meanwhile, firm size was measured using the natural logarithm of total assets (*Ln Total Assets*) to represent the scale of business operations (Rambe, 2020).

The population consisted of 109 basic materials companies listed on the Indonesia Stock Exchange during the 2019–2024 period. The sample was selected using a *non-probability sampling* method through a *purposive sampling* technique based on specific criteria, including firms consistently listed on the IDX and firms reporting profits during the observation period. Based on these criteria, 24 companies were selected as research samples (Sugiyono, 2019). This study used secondary data derived from audited annual financial reports obtained from the official Indonesia Stock Exchange website (*www.idx.co.id*) and each company's official website. Data collection was conducted through documentation techniques by identifying, collecting, and reviewing financial reports relevant to the variables examined (Sugiyono, 2019). Data analysis employed panel data regression because the study combined *cross-sectional* data across firms and *time-series* data from 2019 to 2024. The analysis began with descriptive statistics to summarize research data characteristics (Ghozali, 2018). Subsequently, panel regression estimation was conducted using the *Common Effect Model* (CEM), *Fixed Effect Model* (FEM), and *Random Effect Model* (REM). Model selection was determined through the *Chow Test*, *Hausman Test*, and *Lagrange Multiplier Test* (Basuki & Prawoto, 2016). To ensure statistical reliability, classical assumption tests involving multicollinearity, heteroscedasticity, and autocorrelation were performed before hypothesis testing (Ghozali, 2018). The final stage included panel regression analysis, coefficient of determination (R^2), model feasibility testing (*F-test*), and partial hypothesis testing (*t-test*) to evaluate the effects of capital structure, leverage, and firm size on financial performance among basic materials companies listed on the Indonesia Stock Exchange.

RESULTS

1. Descriptive Statistical Analysis

The results of the descriptive statistical analysis processed using Eviews-12 are presented in the following table

Table1 Descriptive Statistical Analysis Result

	Y	X1	X2	X3
Mean	0.050443	0.550440	0.310859	22.52246
Median	0.047452	0.493970	0.330642	22,31980
Maximum	0.278721	4,561358	0.820188	28.82613
Minimum	0.005398	0.038491	0.037065	13.74701
Std. Dev.	0.034726	0.521883	0.155744	4.935973

Source: compiled by the researcher (2026)

Table2 Descriptive Statistical Analysis Result shows Financial performance measured by Return on Assets (ROA) has a mean value of 0.050443 with a standard deviation of 0.034726, indicating relatively stable variation. The lowest ROA was recorded by PT Semen Baturaja Tbk in 2019, while the highest was reported by PT Bintang Mitra Semestaraya Tbk in 2022. Capital structure measured by the Debt to Equity Ratio (DER) shows a mean of 0.550440 and a standard deviation of 0.521883, with values ranging from PT Sinergi Inti Plastindo Tbk (2024) to PT Bintang Mitra Semestaraya Tbk (2020). Leverage proxied by the Debt to Assets Ratio (DAR) has an average value of 0.310859 and a standard deviation of 0.155744, while firm size measured by Ln Total Assets records a mean of 22.52246 and a standard deviation of 4.935973. Overall, the standard deviation values are lower than the mean values, indicating relatively stable data distribution.

2. Panel Data Model Estimation

a. *Common Effect Model* (CEM)

The initial stage of this research was data processing using the Common Effect Model or Pooled Least Squares method. The results of the data processing obtained using EViews-12 are presented as follows:

Table 3Panel Data Regression *Common Effect Model*

Variables	B	SE	t-statistic	Sig.
C	0.021054	0.017010	1.237745	0.2179
X1	0.008872	0.010625	0.835047	0.4051
X2	-0.007431	0.036129	-0.205678	0.8373
X3	0.001191	0.000604	1,970604	0.0507

Source: compiled by the researcher (2026)

Table 2 the panel data regression results using the *Common Effect Model* (CEM) shows as the initial estimation model. The table presents the regression coefficients, standard errors, *t-statistics*, and significance values of capital structure (*X1*), leverage (*X2*), and firm size (*X3*) on financial performance. The results indicate that firm size tends to show a marginal effect, while capital structure and leverage do not demonstrate significant effects under the CEM estimation. These findings provide an initial overview before determining the most appropriate panel data regression model through model selection tests.

b. *Fixed Effect Model* (FEM)

After conducting the Common Effect Model analysis, the next step is to process it using the Fixed Effect Model method with the following results:

Table 4Panel Data Regression *Fixed Effect Model*

Variables	B	SE	t-statistic	Sig.
C	0.035238	0.244611	0.144057	0.8857
X1	-0.029621	0.011340	-2.612064	0.0102
X2	0.112924	0.052959	2,132288	0.0351
X3	-0.000160	0.010814	-0.014755	0.9883

Source: compiled by the researcher (2026)

Table 3 the panel data regression results shows using the *Fixed Effect Model* (FEM). The results indicate that capital structure (*X1*) has a negative and significant effect on financial performance, while leverage (*X2*) has a positive and significant effect. Meanwhile, firm size (*X3*) does not show a significant effect on financial performance. These findings suggest that financial performance in basic materials companies is more influenced by financing and debt management than by company size.

c. *Random Effect Model* (REM)

After conducting the Fixed Effect Model analysis, the next step is to process it using the Random Effect Model method with the following results:

Table 5Panel Data Regression *Random Effect Model*

Variables	B	SE	t-statistic	Sig.
C	0.004710	0.025599	0.183991	0.8543
X1	-0.016760	0.009928	-1.688259	0.0936
X2	0.067912	0.039679	1,711527	0.0892
X3	0.001503	0.000978	1,536780	0.1266

Source: compiled by the researcher (2026)

Table 4 the panel data regression results shows using the *Random Effect Model* (REM). The results indicate that capital structure (*X1*), leverage (*X2*), and firm size (*X3*) do not have significant effects on financial performance because their significance values exceed the 0.05

level. However, capital structure shows a negative relationship, while leverage and firm size indicate positive relationships with financial performance. These findings provide an alternative estimation before determining the most appropriate panel data regression model.

3. Classical Assumption Test

a. Multicollinearity Test

The results of the multicollinearity test calculations obtained using EViews-12 are as follows.

Table 6Multicollinearity Test Results

	X1	X2	X3
X1	1.000.000	0.848302	-0.043627
X2	0.848302	1.000.000	-0.175480
X3	-0.043627	-0.175480	1.000.000

Source: compiled by the researcher (2026)

Table 5 multicollinearirity test results shows in the table above all correlation values between variables X1, X2, and X3 are less than 0.90, thus concluding that the regression model does not exhibit multicollinearity. This indicates that there is no strong relationship between the independent variables in the model.

b. Heteroscedasticity Test

The results of the heteroscedasticity test calculations obtained using EViews-12 are as follows.

Table 7Heteroscedasticity Test Results

Variables	B	SE	t-statistic	Sig.
C	-0.082644	0.221409	-0.373262	0.7096
X1	0.003892	0.005330	0.730211	0.4667
X2	-0.037323	0.036566	-1.020687	0.3095
X3	0.034512	0.070478	0.489687	0.6253

Source: compiled by the researcher (2026)

Table 6 heteroscedasticity test result shows the probability values of X1, X2, and X3 are greater than 0.05. Therefore, it can be concluded that Ho is accepted and Ha is rejected, which means the model is free from heteroscedasticity symptoms.

c. Autocorrelation test

The autocorrelation test was conducted using the *Durbin–Watson* test to determine whether there is a correlation between residuals in period *t* and period *(t–1)* (Ghozali, 2016). The test results show a Durbin–Watson value (*d*) of 1.9373, with $dU = 1.7704$ and $4 - dU =$

2.2296. Since $dU < d < 4 - dU$ (1.7704 < 1.9373 < 2.2296), the regression model indicates no autocorrelation.

4. Panel Data Regression Analysis

The appropriate model to use in panel data estimation in this study is the Fixed Effect Model. The following are the results of the Fixed Effect Model analysis.

Table 8Panel Data Regression Analysis

Variables	B	SE	t-statistic	Sig.
C	0.035238	0.244611	0.144057	0.8857
X1	-0.029621	0.011340	-2.612064	0.0102
X2	0.112924	0.052959	2,132288	0.0351
X3	-0.000160	0.010814	-0.014755	0.9883

Source: compiled by the researcher (2026)

Table 7. Panel data regression analysis result shows indicates that financial performance is negatively affected by capital structure (X1 = -0.029621) and company size (X3 = -0.000160), while leverage (X2 = 0.112924) positively affects financial performance, with a constant value of 0.035238, assuming other variables remain constant.

5. Coefficient of Determination (R ²)

The results of the coefficient of determination (R2) in this study can be seen in the following table:

Tabel 8. coefficient of Determination

R-Squared	Adjust R Squared
0.534935	0.431587

Source: compiled by the researcher (2026)

Table 8 the coefficient of determination (R^2) shows value of 0.534935 (53.49%) indicates that capital structure, leverage, and company size explain 53.49% of the variation in financial performance, while the remaining 46.51% is influenced by other factors outside this study.

6. Model Feasibility Test (F Test)

The results of the analysis of the F test can be described by the following curve:

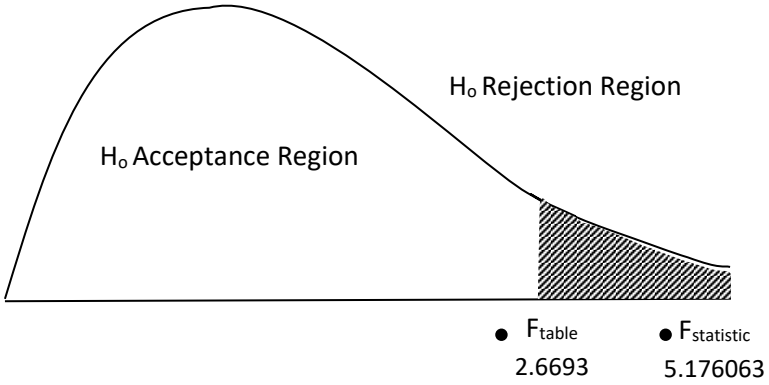


Figure 1F-Test Curve

The figure 1 f-test curve shows that the calculated F statistic of 5.176063 is within the Ho rejection region, so Ha is accepted. Therefore, it can be concluded that the regression model used is appropriate and can be used to estimate the research sample

7. Hypothesis Test (t-Test)

The results of the t-test in this study can be seen in the following table:

Table 9Summary of t-Test Results

Variables	t table	t-statistic	Sig.	Information
X1	1.65581	-2.612064	0.0102	Ha Rejected
X2	1.65581	2,132288	0.0351	Ha Accepted
X3	1.65581	-0.014755	0.9883	Ha Rejected

Source: compiled by the researcher (2026)

Table 9 summary of t-Test Results Show that capital structure (X1) has a significant negative effect on financial performance (t-statistic = -2.612064; Sig. = 0.0102 < 0.05), leverage (X2) has a significant positive effect (t-statistic = 2.132288; Sig. = 0.0351 < 0.05), while company size (X3) has no significant effect on financial performance (t- statistic = -0.014755; Sig. = 0.9883 > 0.05).

a. First hypothesis testing

The image of the t-test curve for the capital structure variable is as follows:

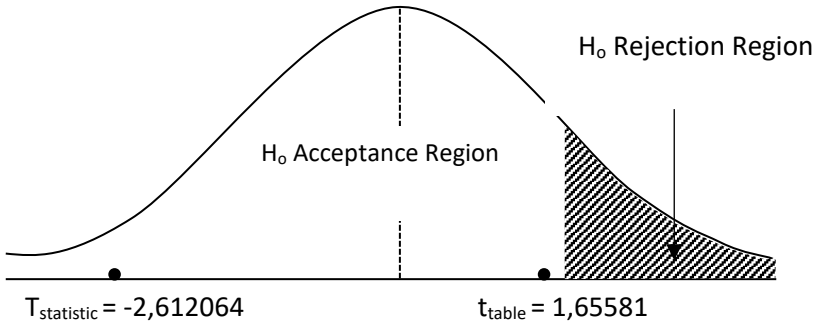


Figure 22t-Test Curve of Capital Structure Variable

Figure 2 t-test curve of capital structure variable result shows illustrates that the t-statistic value (-2.612064) falls within the Ho acceptance region, indicating that the capital structure variable does not have a significant positive effect on financial performance, so Ha is rejected.

b. Testing the second hypothesis

The image of the t-test curve for the leverage variable is as follows:

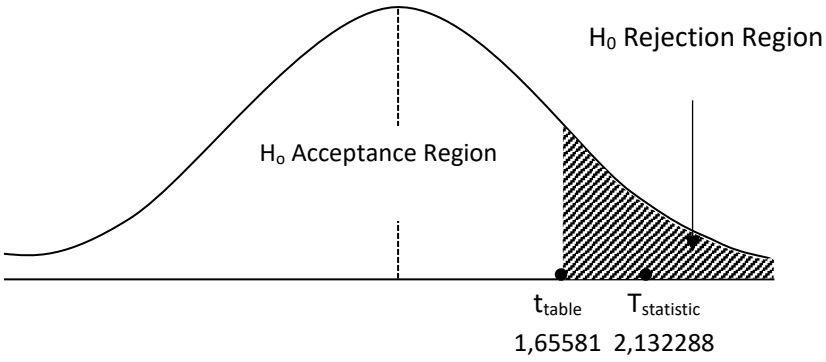


Figure 3t-Test Curve *of Leverage Variable*

Figure 3 t-test curve of leverage variable result shows the calculated t-statistic of 2.132288 is within the Ho rejection region, thus Ha is accepted. Therefore, it can be concluded that the second hypothesis, which states that *leverage has a positive and significant effect on financial performance in basic materials* sector companies listed on the IDX in 2019-2024, is accepted.

c. Third hypothesis testing

The image of the t-test curve for the firm size variable is as follows:

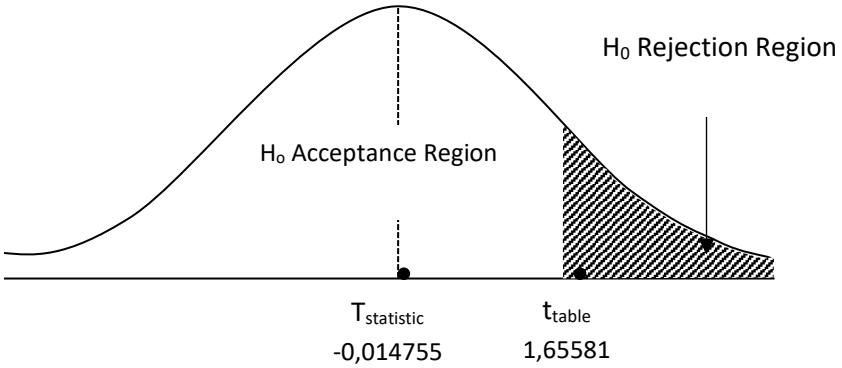


Figure 4t-Test Curve of Company Size Variable

Figure 4 t-test curve of company size variable result shows, the calculated t-statistic of -0.014755 is within the Ho acceptance range, so Ha is rejected. Therefore, it can be concluded that the third hypothesis, which states that company size has a positive and significant effect on financial performance in *basic materials sector companies* listed on the IDX in 2019-2024, is rejected.

DISCUSSION

The findings of this study demonstrate that capital structure, leverage, and firm size exhibit different relationships with the financial performance of basic materials companies listed on the Indonesia Stock Exchange during the 2019–2024 period. These findings indicate that financial performance is not influenced by a single determinant but rather by a combination of financing strategies, debt utilization, and organizational characteristics that shape corporate financial outcomes. The study contributes to understanding how firms within the basic materials sector respond to economic fluctuations, financial risks, and operational challenges through financial decision-making.

The first finding indicates that capital structure, measured using the *Debt to Equity Ratio* (DER), has a significant negative effect on financial performance proxied by *Return on Assets* (ROA). This result suggests that an increase in debt relative to equity tends to reduce the profitability of firms in the basic materials sector. In practical terms, companies with excessive dependence on debt financing may face higher financial burdens, particularly interest expenses and repayment obligations, which reduce operational efficiency and

profitability. Since ROA measures the firm's ability to generate earnings through asset utilization, an increasing debt burden may weaken a firm's capacity to maximize returns generated from available resources. Therefore, the finding implies that ineffective financing structures may negatively affect corporate financial sustainability. The negative effect of capital structure on financial performance may also be explained by the characteristics of the basic materials sector, which is highly sensitive to macroeconomic uncertainty, commodity price fluctuations, and cyclical industrial demand. During the observation period, companies in this sector experienced economic disruptions caused by post-pandemic instability, increasing production costs, and fluctuations in export demand, making firms with high debt dependency more vulnerable to financial pressure. Under such circumstances, firms with excessive leverage may experience declining profitability because debt obligations continue to increase even when operational earnings weaken. From the perspective of pecking order theory, this finding shows that funds originating from debt have not been utilized optimally to generate greater profits than the costs incurred (Myers & Majluf, 1984). Investors may perceive excessive debt as an indication of increased financial risk, which weakens confidence in a company's long-term profitability and sustainability. Consequently, firms with more balanced financing structures are likely to be viewed as financially healthier and more capable of maintaining stable financial performance.

This result is consistent with previous studies reporting that capital structure negatively influences financial performance because excessive debt financing increases financial obligations and limits firms' ability to maximize earnings (Febiola & Susanti, 2024). Similar conclusions were also identified in studies showing that high debt dependency tends to weaken operational efficiency and profitability due to increasing financing costs (Le & Phan, 2017). These findings reinforce the argument that inappropriate financing composition may reduce corporate performance, particularly in industries exposed to substantial financial volatility. However, this result differs from studies arguing that debt financing positively contributes to profitability because firms may utilize external capital to expand investment and operational activities (Sembiring et al., 2024). The inconsistency suggests that the effect of capital structure depends heavily on industrial context, managerial efficiency, and firms' ability to convert financing into productive outcomes.

The second finding reveals that leverage, measured through the *Debt to Assets Ratio* (DAR), has a positive and significant effect on financial performance. This result indicates that firms capable of utilizing debt effectively to finance productive assets tend to achieve

higher profitability. Unlike the negative effect identified in the capital structure variable, leverage in this context appears to function as a strategic financing instrument enabling firms to optimize operational capacity and increase financial returns. The finding implies that debt utilization may contribute positively to financial performance when firms successfully allocate borrowed resources into productive investments. The positive effect of leverage may reflect the operational characteristics of firms in the basic materials sector, which often require substantial capital to support large-scale industrial production, infrastructure-related activities, and resource-intensive operations. Since operational expansion frequently demands significant financial resources, firms may rely on debt financing to strengthen production capacity and improve competitiveness. When managed efficiently, leverage may increase the productivity of corporate assets, leading to stronger profitability and financial performance. This finding can also be interpreted through trade-off theory, where the primary benefit of using debt is the tax shield, which reduces the tax burden because interest costs can be deducted from taxable income. This benefit can increase after-tax profits and ultimately have a positive impact on a company's financial performance (Kraus & Litzenberger, 1973). Investors may interpret moderate and productive debt utilization as evidence that management possesses confidence in the firm's future performance and growth potential. In this sense, leverage becomes not merely a source of financial obligation but also an indicator of strategic financial management capable of generating higher returns.

The finding supports studies reporting that leverage positively affects financial performance because firms may use debt financing to expand operations and improve productivity (Safira et al., 2025). Similar findings suggest that debt utilization contributes positively to profitability when supported by efficient financial planning and strong operational management (Maharani & Hanah, 2023). Nevertheless, this finding contrasts with studies emphasizing the negative consequences of leverage, particularly when debt dependency creates excessive financial pressure and increases bankruptcy risk (Rizky et al., 2024). Such differences imply that leverage may generate different outcomes depending on managerial effectiveness, financial discipline, and the economic environment in which firms operate.

The third finding demonstrates that firm size, measured using the natural logarithm of total assets (*Ln Total Assets*), does not significantly affect financial performance. This result suggests that a larger organizational scale does not necessarily guarantee higher profitability among firms operating in the basic materials sector. Although larger firms generally possess

broader access to financial resources, stronger market positions, and larger operational capacities, such advantages may not automatically translate into better financial outcomes. The insignificant relationship indicates that the ability to generate profitability depends not merely on the quantity of assets owned but also on how effectively these assets are managed to create operational efficiency and financial returns. This finding may be interpreted in relation to the characteristics of the basic materials sector, where companies often require substantial fixed assets and capital-intensive operations to maintain production activities. In such industries, a large asset base may increase operational capacity; however, it simultaneously raises maintenance costs, operational complexity, and financial risks. Consequently, firms with larger assets may not necessarily achieve higher profitability if managerial effectiveness and operational efficiency remain limited. In other words, asset ownership alone is insufficient to ensure stronger financial performance without efficient resource management.

From an agency theory perspective, company size is not always a factor that directly improves financial performance because the size of a company's assets is often accompanied by increased operational complexity and agency costs (Jensen & Meckling, 1976). The larger the company, the greater the challenges faced in monitoring and controlling management actions, making the effectiveness of asset management more important than simply the size of the company. Therefore, financial performance is determined more by management's ability to efficiently manage company resources than by the company's scale itself.

This finding is consistent with studies reporting that firm size has no significant influence on financial performance because larger organizational scale does not automatically improve profitability or operational effectiveness (Afridayani & Putren, 2025). Similar findings also indicate that firms with greater assets may still experience inefficiency due to managerial limitations, operational complexity, or ineffective asset utilization (Sharfina et al., 2023). However, the result contradicts studies suggesting that firm size positively influences financial performance because larger firms possess stronger financial capacity, economies of scale, and broader access to external financing (Ad'hani et al., 2024). These contradictory findings further emphasize that the effect of firm size depends on industrial context and managerial effectiveness in utilizing organizational resources productively. Overall, the findings of this study demonstrate that financial performance within the basic materials sector is influenced by financing strategies and debt management rather than organizational scale alone. The contrasting effects between capital structure and leverage indicate that debt

may simultaneously function as a source of opportunity and financial risk depending on how firms allocate and manage borrowed funds. Excessive dependence on debt relative to equity may reduce profitability due to increasing financial burdens, whereas productive debt utilization for operational assets may strengthen financial performance. This finding highlights the importance of maintaining balanced financing policies capable of supporting operational sustainability while minimizing financial pressure. Theoretically, this study contributes to the development of financial management literature by providing empirical evidence concerning the relationships among capital structure, leverage, firm size, and financial performance within Indonesia's basic materials sector. These findings reinforce Pecking Order Theory, Trade-Off Theory, and Agency Theory by demonstrating that capital structure decisions, leverage levels, and the effectiveness of corporate asset management are factors that can influence financial performance. The results of this study indicate that the use of funding sources and the proper management of corporate resources are important aspects in increasing a company's ability to generate profits and achieve optimal financial performance (Myers & Majluf, 1984; Kraus & Litzenberger, 1973; Jensen & Meckling, 1976). The study also expands previous literature by demonstrating that the influence of financing-related variables may differ depending on industrial context and economic conditions. Practically, the findings provide implications for corporate management, investors, and policymakers. For managers, the results suggest the importance of establishing efficient financing policies and maintaining optimal debt allocation to avoid excessive financial pressure while sustaining operational productivity. Firms are encouraged to improve financial planning and strengthen asset utilization to achieve better profitability. For investors, the findings imply that investment decisions should not rely solely on firm size or debt proportion but should also consider managerial effectiveness in utilizing financing resources productively. Meanwhile, policymakers and financial regulators may use these findings as supporting evidence for designing policies related to corporate financial resilience and sustainable industrial performance. Methodologically, this study contributes to empirical financial research through the application of panel data regression in analyzing financial performance determinants across firms and over time. The use of panel data enables more comprehensive analysis because it integrates *cross-sectional* and *time-series* dimensions, allowing broader interpretation of corporate financial behavior during periods characterized by economic fluctuation and post-pandemic recovery. Despite its contributions, this study has several limitations that should be acknowledged objectively. First, the study focuses

exclusively on companies within the basic materials sector listed on the Indonesia Stock Exchange, limiting the generalizability of findings to firms operating in different industrial contexts. Second, the research only examines three independent variables—capital structure, leverage, and firm size—while financial performance may also be influenced by additional factors such as liquidity, corporate governance, operational efficiency, and macroeconomic conditions. Third, the observation period between 2019 and 2024 reflects specific economic circumstances, particularly pandemic disruption and post-pandemic recovery, which may influence financial performance patterns differently from other economic periods.

Therefore, future studies are encouraged to expand industrial coverage, include additional explanatory variables, and utilize broader observation periods to obtain more comprehensive explanations regarding financial performance determinants. Comparative studies across industrial sectors may also strengthen understanding of how financial strategies operate under varying organizational and economic conditions. Through these developments, future research may provide broader theoretical and practical contributions to financial management studies and corporate sustainability.

CONCLUSION

This study aimed to examine the effects of capital structure, leverage, and firm size on the financial performance of basic materials companies listed on the Indonesia Stock Exchange during the 2019–2024 period. Based on panel data regression analysis using the *Fixed Effect Model* (FEM), the findings reveal that capital structure, measured by the *Debt to Equity Ratio* (DER), has a negative and significant effect on financial performance proxied by *Return on Assets* (ROA). This result indicates that excessive dependence on debt relative to equity tends to reduce profitability because higher financial obligations and financing costs may weaken firms' ability to optimize asset utilization. In contrast, leverage, measured using the *Debt to Assets Ratio* (DAR), shows a positive and significant influence on financial performance, suggesting that effective debt utilization may support productive asset management and improve corporate profitability. Meanwhile, firm size, measured through the natural logarithm of total assets, does not significantly affect financial performance, implying that larger organizational scale alone does not necessarily ensure greater profitability without effective resource management.

The findings successfully address the research objectives by demonstrating that internal corporate factors influence financial performance differently depending on financing strategies and managerial effectiveness. This study contributes theoretically by strengthening empirical understanding of the relationships among capital structure, leverage, firm size, and financial performance within Indonesia's basic materials sector, while emphasizing the importance of efficient financing management over organizational scale alone. From a practical perspective, the findings may assist corporate managers in formulating more effective financing and asset management policies to improve profitability and financial sustainability. Future studies are recommended to expand research coverage by including additional industrial sectors, extending observation periods, and incorporating other variables such as liquidity, asset growth, *corporate social responsibility* (CSR), investment decisions, or macroeconomic factors to provide broader explanations regarding the determinants of financial performance.

REFERENCES

Ad'hani, F. I., Makhdalena, & Trisnawati, F. (2024). Pengaruh Struktur Modal dan Ukuran Perusahaan terhadap Kinerja Keuangan. *JIIP - Jurnal Ilmiah Ilmu Pendidikan, 7*(7), 6525–6530. https://doi.org/10.54371/jiip.v7i7.5215

Adventy, A. (2024, May 24). *Ratusan Emiten Turun Kelas ke Papan Pengembangan, Mayoritas Sektor Basic Material & Konsumer*. Bisnis.com. https://market.bisnis.com/read/20240524/7/1768050/ratusan-emiten-turun-kelas-ke-papan-pengembangan-mayoritas-sektor-basic-material-konsumer

Afridayani, & Putren, I. (2025). Pengaruh Ukuran Perusahaan, Struktur Modal, dan Corporate Social Responsibility terhadap Kinerja Keuangan. *Balance: Jurnal Akuntansi dan Bisnis, 10*(1), 117–130. https://doi.org/10.32502/balance.v10i1.650

Amalia, A. N., & Khuzaini. (2021). Pengaruh Ukuran Perusahaan, Leverage, dan Struktur Modal terhadap Kinerja Keuangan. *Jurnal Ilmu dan Riset Manajemen, 10*(5), 1–17. https://jurnalmahasiswa.stiesia.ac.id/index.php/jirm/article/view/4025

Anandayama, V. P. L., & Suwardi, H. B. (2021). Pengaruh Good Corporate Governance, Ukuran Perusahaan, dan Leverage terhadap Kinerja Keuangan. *Jurnal Ilmu dan Riset Akuntansi, 10*(5), 1–24. https://jurnalmahasiswa.stiesia.ac.id/index.php/jira/article/view/3988

Basuki, A. T., & Prawoto, N. (2016). *Analisis Regresi dalam Penelitian Ekonomi dan Bisnis*. PT Rajagrafindo Persada.

Brigham, E. F., & Houston, J. F. (2019). *Dasar-Dasar Manajemen Keuangan* (14th ed.). Salemba Empat.

Fachrurrozi, M. F. P., Ma'sumah, S., & Rossana, L. (2024). Pengaruh ROA, CR, TATO, DER, dan ROE terhadap Return Saham Perusahaan Sektor Transportasi dan Logistik yang Terdaftar di BEI Tahun 2019–2022. *Jurnal Riset Keuangan dan Akuntansi, 10*(1), 86–102. https://doi.org/10.25134/jrka.v10i1.9845

Fajar, G. I., Santoso, S. B., Haryanto, E., & Santoso, S. E. B. (2025). Pengaruh Leverage, Ukuran Perusahaan, Struktur Modal terhadap Kinerja Keuangan Perusahaan. *Journal of Accounting and Finance Management, 5*(6), 1328–1338. https://doi.org/10.38035/jafm.v5i6.1294

Febiola, D., & Susanti, S. (2024). Pengaruh Struktur Modal dan Likuiditas terhadap Kinerja Keuangan pada Sub Sektor Basic Materials yang Terdaftar di BEI Tahun 2019–2023. *Jurnal Ekonomi dan Bisnis, 2*(11), 1987–2000. https://j-economics.my.id/index.php/home/article/view/302

Ghozali, I. (2018). *Aplikasi Analisis Multivariate dengan Program IBM SPSS 25*. Universitas Diponegoro.

Gunawan, C., Sudarsi, S., & Aini, N. (2022). Pengaruh Likuiditas, Struktur Modal, Ukuran Perusahaan, dan Risiko Operasional Perusahaan terhadap Kinerja Keuangan Perusahaan pada Industri Manufaktur yang Terdaftar di Bursa Efek Indonesia Tahun 2018–2020. *Dinamika Akuntansi, Keuangan dan Perbankan, 11*(1), 31–40. https://doi.org/10.35315/dakp.v11i1.8951

Hasti, W. W., Maryani, M., & Makshun, A. (2022). Pengaruh Leverage, Struktur Modal, dan Ukuran Perusahaan terhadap Kinerja Keuangan pada Perusahaan Sektor Pertambangan. *Reviu Akuntansi, Manajemen dan Bisnis, 2*(2), 139–150. https://doi.org/10.35912/rambis.v2i2.1544

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics, 3*(4), 305–360. https://doi.org/10.1016/0304-405X(76)90026-X

Kraus, A., & Litzenberger, R. H. (1973). A state-preference model of optimal financial leverage. *The Journal of Finance, 28*(4), 911–922. https://doi.org/10.2307/2978343

Kusniawati, H., & Amin, M. N. (2024). Pengaruh Intellectual Capital, Struktur Modal, Kepemilikan Institusional terhadap Kinerja Keuangan dengan Ukuran Perusahaan sebagai Pemoderasi. *El-Mal: Jurnal Kajian Ekonomi & Bisnis Islam, 5*(4), 3021–3038. https://doi.org/10.47467/elmal.v5i4.1838

Le, T. P. V., & Phan, T. B. N. (2017). Capital structure and firm performance: Empirical evidence from a small transition country. *Research in International Business and Finance, 42*, 710–726. https://doi.org/10.1016/j.ribaf.2017.07.012

Maharani, A. F., & Hanah, S. (2023). Pengaruh Struktur Modal, Leverage, dan Kepemilikan Manajerial terhadap Kinerja Keuangan. *Jurnal Economina, 2*(11), 3168–3177. https://doi.org/10.55681/economina.v2i11.791

Makhdalena. (2014). Pengaruh Blockholders Ownership, Firm Size, dan Leverage terhadap Kinerja Keuangan Perusahaan. *Ekuitas: Jurnal Ekonomi dan Keuangan, 18*(3), 277–292. https://doi.org/10.24034/j25485024.y2014.v18.i3.136

Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics, 13*(2), 187–221. https://doi.org/10.1016/0304-405X(84)90023-0

Purwanti, D. (2021). Determinasi Kinerja Keuangan Perusahaan: Analisis Likuiditas, Leverage, dan Ukuran Perusahaan (Literature Review Manajemen Keuangan). *Jurnal Ilmu Manajemen Terapan, 2*(5), 692–698. https://doi.org/10.31933/jimt.v2i5.593

Rahmansyah, A., & Helliana. (2023). Pengaruh Likuiditas dan Ukuran Perusahaan terhadap Kinerja Keuangan. *Jurnal Riset Akuntansi, 3*(2), 111–116. https://doi.org/10.29313/jra.v3i2.2795

Rambe, B. H. (2020). Analisis Ukuran Perusahaan, Free Cash Flow (FCF), dan Kebijakan Hutang terhadap Kinerja Keuangan pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia. *Ecobisma: Jurnal Ekonomi, Bisnis dan Manajemen, 7*(1), 54–64. https://doi.org/10.36987/ecobi.v7i1.1530

Reuters. (2026, February 3). *Russia's Severstal reports big profit drop, sees further decline in steel demand.* https://www.reuters.com/business/russias-severstal-reports-big-profit-drop-sees-further-decline-steel-demand-2026-02-03

Riyadi, S. S., & Winingrum, S. P. W. A. (2024). Pengaruh Corporate Social Responsibility (CSR), Size (Ukuran) Perusahaan, Leverage, dan Keputusan Investasi terhadap Kinerja Keuangan Perusahaan: Studi Empiris pada Perusahaan Basic Materials yang Terdaftar di Bursa Efek Indonesia Tahun 2019–2023. *JAMBU AIR: Journal of Accounting Management Business and International Research, 3*(2), 249–264. https://doi.org/10.57235/jambuair.v3i2.3186

Rizky, M., Jamal, S. W., & Anshari, R. (2024). Pengaruh Leverage dan Likuiditas terhadap Kinerja Perusahaan Pertambangan. *Journal of Trends Economics and Accounting Research, 5*(1), 19–26. https://doi.org/10.47065/jtear.v5i1.1476

Safira, R., Yanti, Y., & Lukita, C. (2025). Pengaruh Ukuran Perusahaan dan Leverage terhadap Kinerja Keuangan: Studi pada Perusahaan Pertambangan yang Terdaftar di Bursa Efek Indonesia Periode 2020–2022. *EKOMA: Jurnal Ekonomi, Manajemen, Akuntansi, 4*(6), 9757–9766. https://doi.org/10.56799/ekoma.v4i6.12106

Satriawibawa, F. S., & Sitinjak, E. L. M. (2024). Pengujian Mekanisme Tata Kelola dan Pertumbuhan Perusahaan terhadap Kinerja Keuangan Perusahaan Teknologi. *Wahana: Jurnal Ekonomi, Manajemen dan Akuntansi, 27*(2), 236–250. https://doi.org/10.35591/wahana.v27i2.930

Sembiring, S., Shalini, W., Mahendra, A., & Parhusip, P. T. (2024). Pengaruh Ukuran Perusahaan, Struktur Modal, dan Likuiditas terhadap Kinerja Keuangan pada Perusahaan Pertambangan yang Terdaftar di BEI Periode 2020–2022. *Jurnal Riset Akuntansi & Keuangan, 10*(2), 158–171. https://ejournal.ust.ac.id/index.php/JRAK/article/view/4088

Sharfina, M., Ane, L., & Anggriyani, A. (2023). Pengaruh Modal Intelektual, Ukuran Perusahaan, dan Kualitas Aktiva Produktif terhadap Kinerja Keuangan pada Perusahaan Perbankan. *JAKPI: Jurnal Akuntansi, Keuangan & Perpajakan Indonesia, 11*(1), 1–12. https://doi.org/10.24114/jakpi.v11i1.47796

Sugiyono. (2019). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. CV Alfabeta.

World Bank. (2025, April 29). *Falling Commodity Prices Could Mute Inflation Risks from Trade Tensions.* https://www.worldbank.org/en/news/press-release/2025/04/29/commodity-markets-outlook-april-2025-press-release

Yuliani, S., Chaidir, M., & Yulianti, G. (2025). Pengaruh Pertumbuhan Aset, Likuiditas, dan Struktur Modal terhadap Kinerja Keuangan Sektor Basic Material yang Terdaftar di BEI. *Jambura Accounting Review, 6*(2), 528–542. https://doi.org/10.37905/jar.v6i2.182