

# The Influence of Leverage, Managerial Ownership, Liquidity, and Firm Size on Financial Performance in Basic Materials Companies Listed on the Indonesia Stock Exchange

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## Abstract

The study aims to explore the significant influence of leverage, managerial ownership, liquidity, and firm size on financial performance, as assessed through DAR (Debt to Asset Ratio), managerial ownership levels, CR (Current Ratio), LN (natural logarithm), and ROA (Return on Asset). The research sample comprises 89 companies that were listed on the Indonesia Stock Exchange between 2020 and 2022, including those submitting annual financial reports for the same period. Purposive sampling was employed in selecting the sample. Data analysis relied on secondary data obtained through documentation methods. The audited financial reports sourced from the Indonesia Stock Exchange's official website served as the research data. The concurrent findings of the study indicate that the effects of business size, liquidity, managerial ownership, and leverage are negligible. Partial results suggest that, collectively, the independent variables do not significantly impact the dependent variable.

**Keywords:** *Leverage, Managerial Ownership, Liquidity, Firm Size, Financial Performance.*



## A. INTRODUCTION

The condition of the digital economy is typically closely connected to a nation's financial performance. As the digital economy of companies and nations continues to evolve, it is expected that they will be able to gain greater income and opportunities. A company's success hinges on the effectiveness of its financial performance. According to Theacini & Wisadha (2014), to achieve a company's goals, management often makes inappropriate decisions regarding corporate accounting policies and procedures, which are expected to affect the improvement of the company's financial performance.

Financial performance, according to Rudianto (2013), is the outcome attained by a company's management through efficient asset management within a given time frame. Currently, stocks in the Indonesia Stock Exchange (BEI) are classified into 12 sectors, namely Energy, Healthcare, Basic Materials, Financials, Transportation & Logistics, Technology, Consumer Cyclicals, Infrastructures, Property & Real Estate issuers (Rosyida, 2015). Basic Materials reflect or represent the stock prices of 103 issuers. According to Arofah (2021), basic materials companies are sectors with companies that provide materials, such as construction materials and chemicals. Basic materials companies consist of companies with business processes related to

converting raw materials into semi-finished or finished goods and will still be processed in subsequent economic activities.

Leverage, as defined by Harahap (2011), is a ratio depicting the relationship between a company's debt and its equity and assets, ideally favoring higher equity over debt. Prihadi (2020) characterizes leverage as the capacity of a company to settle its long-term debt obligations. Vidiantoro & Qomari (2013) highlight that leverage ratios serve to gauge a company's capability in managing financial responsibilities during periods of liquidity. A good debt ratio benefits the company in managing both long-term and short-term opportunities (Selviana, 2020).

Managerial ownership pertains to the possession of shares by a company's management and is evaluated based on the percentage of shares owned by the management team. Sujono & Soebiantoro (2007) argue that managerial ownership can foster alignment between the interests of internal stakeholders and investors. According to Fahmi & Nabila (2020), managerial ownership denotes the proportion of shares held by actively involved management personnel, encompassing commissioners and directors. By being both managers and shareholders, they possess the ability to enhance their company's value, consequently elevating its overall worth (Nilayanti & Suaryana, 2019).

According to Hendra (2009), liquidity ratio measures a company's ability to meet its short-term obligations that are due. Wijaya & Wibowo (2022) define liquidity as a ratio gauging the correlation between a company's current assets and its current liabilities. Prihadi Toto (2013:171) describes liquidity as a company's capacity to discharge short-term liabilities, which are debts due within a year. According to Hasmita (2017), if a company wants to avoid financial difficulties, it needs to have good working capital by operating at its maximum capacity.

Firm size represents the stability and capability of a company to conduct economic activities (Ariska, Fahru, & Kusuma, 2020). According to Hery (2017), a benchmark index of a company that depicts the amount of assets or turnover owned by a company and is categorized based on the size of ownership or asset turnover in a period. According to Zaki (2017), strong financial structures in large companies signify wealth and good performance, thus increasing the amount of investment made by investors, which ultimately can raise stock prices. Company size is an indicator used to assess the scale of a business, which can be evaluated through different metrics such as total assets and total sales (Saemargani 2015). If a company has large total assets, then management has more freedom in utilizing company assets, and if a company has large total sales, it means the company can manage its inventory well and generate profits (Sari, Titisari, & Nurlaela, 2020).

Based on the provided description, the researcher intends to investigate the impact of leverage, managerial ownership, liquidity, and firm size on the financial performance of basic materials companies listed on the Indonesia Stock Exchange.

## B. METHOD

This type of research is associative research. According to Dinsar (2021), associative study seeks to ascertain how two or more variables are related to one another. This study creates a theory that can explain, predict, and control the phenomena under study.

The data for this research uses secondary data obtained through documentation techniques. According to Kojongian, Mangantar, & Maramis (2022), documentation is a method of data collection by examining or analyzing documents written by the subjects themselves or other subjects. According to Ariska, Fahru, & Kusuma (2020), secondary data refers to information acquired indirectly through intermediaries. The research data consists of audited financial records retrieved from the Indonesia Stock Exchange's official website (BEI).

All companies in the basic materials sector make up the population utilized, totaling 103 companies from 2020 to 2022. According to Sugiono (2020), a sample represents a subset of the population possessing similar characteristics and numbers. The sampling method utilized in this study is purposive sampling. According to Laluraa, Mangantar, & Palandeng (2022), purposive sampling is a sampling method guided by specific considerations. The aim of this technique is to intentionally bias the resulting data towards certain characteristics or attributes of interest. There are 89 companies listed on the BEI sequentially during the period 2020-2022 and companies that submitted annual financial reports for the period 2020-2022.

The study employs Leverage ( $X_1$ ), Managerial Ownership ( $X_2$ ), Liquidity ( $X_3$ ), and Firm Size ( $X_4$ ) as independent variables, while Financial Performance ( $Y$ ) serves as the dependent variable.

## C. RESULTS AND DISCUSSION

### 1. Test of Classical Assumptions

**Table 1 Normality Test Results**  
Kolmogorov-Smirnov Test Sample One

		Unstandardized Residual
N		89
Standard Parameters <sup>a,b</sup>	Imply	.0000000
	Standard Deviation	.03506456
Most Severe Gap	Complete	.064
	Positive	.036
	Negative	-.064
Examine Statistics		.064
Asymp. Sig. (2-tailed)		.200c,d

a. Distribution of the test is normal.

b. computed using information.

c. The Significance Correction of Lilliefors.

d. This is a lower constraint on the actual importance.

Source: Processed Data, 2024

The normality test is utilized to ascertain if population data follows a Gaussian distribution (Siregar, 2017). When the significance level surpasses 0.05, the data is regarded as normally distributed; if it descends below 0.05, the data is considered non-

normally distributed. The one-sample Kolmogorov-Smirnov test is utilized to conduct the normality test. Data is acknowledged as normally distributed if it produces an asymptotic significance value  $> \alpha = 5\%$  (Handoko, 2006).

From The outcomes of the normality test indicated above using In the Kolmogorov-Smirnov test, the obtained value is 0.200 with a significance level of 0.05. Based on this, we can conclude that  $0.200 > 0.05$ , demonstrating the normal distribution of the data.

**Table 2 Multicollinearity Test Outcome**

Coefficients<sup>a</sup>

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Leverage	,949	1,054
	Km	,947	1,056
	Likuiditas	,881	1,135
	Company_Size	,964	1,037

a. Dependent Variable: Financial\_Performance

Source: Processed Data, 2024

Multicollinearity test involves determining the regression model investigates correlations among independent variables (Ghozali, 2016). As indicated in the provided table, all independent variables exhibit tolerance values  $> 0.10$ . Similarly, the results of the Variance Inflation Factor (VIF) calculations indicate that all independent variables have VIF values  $< 10$ . Therefore, it can be inferred that this regression model does not display multicollinearity.

**Table 3 Result of Autocorrelation Test**

Runs Test

	Unstandardized Residual
Value <sup>a</sup> Test	-936113959
Cases $<$ Test Scores	44
Cases $\geq$ Test Score	45
The Number of Cases	89
The Number of Runs	47
Z	,321
Asymp. Sig. (2-Tailed)	,748

a. Middle

Source: Processed Data, 2024

The purpose of the autocorrelation test is to establish whether there exists a correlation between error disturbances observed in period  $t$  and those in period  $t-1$  within the context of a linear regression model (Widyastuti, 2012). The running test approach can be used to ascertain whether autocorrelation is present (Moehariono, 2012). As the table illustrates above, the asymptotic significance (2-tailed) value is 0.748, which is greater than 0.05. Hence, it can be inferred that the research data utilized does not demonstrate autocorrelation phenomena.

**Table 4 Result of Heteroskedasticity Test**

		Coefficients <sup>a</sup>				
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1162459002.650	552345204.738		2.105	.038
	Leverage	,409	,269	,157	1,522	,132
	Km	,143	,052	,286	2,761	,007
	Liquidity	,195	,082	,256	2,390	,019
	Company_Size	-,281	,264	-,109	-1,068	,289

a. Dependent Variable: Res

Source: Processed Data, 2024

The heteroskedasticity test is employed to assess whether there are disparities in residual variance across observations in the regression model. Any variation in variance could lead to symptoms of heteroskedasticity (Subianto, 2016). To test for heteroskedasticity symptoms, the Glejser Test is utilized. This test involves regressing the absolute residual values on the independent variables. A regression model is deemed free from heteroskedasticity if no statistically significant effects on the dependent variable are observed from any of the independent variables (Hery, 2017).

In the table above, it can be observed the significance values for the leverage, liquidity, and firm size variables are greater than  $> 0.05$ , indicating non-significance, whereas the managerial ownership (KM) variable possesses a significance value  $< 0.05$ . In summary, the variables related to leverage, liquidity, and business size do not demonstrate heteroskedasticity symptoms, while the managerial ownership variable shows heteroskedasticity symptoms.

**Table 5 Outcome of Linearity Examination Test**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,017	,000	-,047	,03588430

a. Predictors: (Constant), Leverage, Managerial Ownership, Liquidity, Company Size

The linearity of the test is to determine the accuracy of the model specification employed (Widiatmoko, 2020), the linearity test is executed utilizing the Lagrange Multiplier test. According to Sugiyono (2017), the Lagrange Multiplier test is used to test random effects according to the common effect model's residual values. As the output shows an R2 value of 0.000 from a total of 89 observations, resulting in a calculated c2 value of  $89 \times 0.000 = 0$ . Then, the obtained c2 value is juxtaposed with the c2 Table, having degrees of freedom (df) = 89 and a significance level of 0.05 or 5%, yielding a c2 Table value of 110.898. Given that the obtained c2 value is lower than the c2 Table value, it can be inferred that the research data model exhibits linearity. Consequently, the predetermined data analysis technique can be applied. The outcomes of the linearity test are presented in Table 5.

## 2. Statistical Test

**Table 6 Results of Multiple Linear Regression Analysis**

Model		Coefficients <sup>a</sup>				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Continuous)	190,947	32,295		5,913	,000
	Leverage	,016	,063	,024	,252	,802
	Km	5,349	,000	,022	,234	,816
	Liquidity	,036	,030	,109	1,172	,244
	Company_Size	-10,061	1,871	-,510	-5,376	,000

a. Dependent Variable: Financial Performance

Source: Processed Data, 2024

$Y = 190,947 + 0,016 X_1 + 5,349 X_2 + 0,036 X_3 - 10,061 X_4 + e$ . The constant value of 190.947 elucidates that when the influences of leverage, managerial ownership, liquidity, and firm size are all zero, the contribution to financial performance amounts to 190.947. If leverage If one unit increase occurs in leverage, the enhancement in financial performance is projected to be 0.016. For managerial ownership, an increase of one unit is expected to result in a 5.349 rise in financial performance. Likewise, a one-unit increase in liquidity is projected to yield a financial performance increase of 0.036. Lastly, an increase of one unit in firm size is estimated to raise financial performance by 10.061.

**Table 7 Result of Multiple Correlation Coefficient (R) and Examination of Determination Coefficient (R<sup>2</sup>)**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,536	,287	,253	38,503433

a. Predictors: (Constan), Leverage, Managerial Ownership, Liquidity, Company Size

Source: Processed Data, 2024

From Table 7, the multiple correlation coefficient (R) value obtained is 0.536. This means that leverage, managerial ownership, liquidity, and firm size have a moderately strong relationship with financial performance, with a value of 0.536.

The coefficient of determination test conducted on the regression model involving leverage, managerial ownership, liquidity, and firm size with respect to financial performance yielded a value of 0.287. This suggests that 28% ( $1 \times 0.287 \times 100\%$ ) of the variance in financial performance can be accounted for by these variables. The remaining 72% ( $1 - 0.287 = 0.713$  or 71.3%) of the variance in financial performance can be attributed to other factors not accounted for in the study.

**Table 8 Result of Simultaneous Influence Test (F Test)**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	479498977,059	4	119874744,264	1.960	.108 <sup>b</sup>
	Residual	513734492,357	84	611588681,377		
	Total	561684390,063	88			

a. Dependent Variable: Financial\_Performance

b. Predictors: (Constant), Company\_Size, Managerial\_Ownership, Leverage, Liquidity

Source: Processed Data, 2024

It is known that collectively the independent variables exhibit no effect on the dependent variable, as indicated by the obtained F-value of 1.960 compared to the F-table value of 2.32, the test result shows that the F-value of  $1.960 < 2.32$  with an important value of 0.108 more than 0.05. This indicates that the independent factors of leverage, managerial ownership, liquidity, and business size taken together do not significantly affect financial performance, leading to the rejection of the null hypothesis ( $H_0$ ).

**Table 9 Result of Partial Influence Test (t Test)**

Model		Coefficients <sup>a</sup>				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1746,822	9727,416		1,796	,076
	Leverage	,773	,473	,175	1,633	,106
	Km	,140	,091	,165	1,537	,128
	Liquidity	,120	,144	,093	,832	,408
	Firm_Size	-,665	,464	-,152	-1,433	,156

a. Dependent Variable: Financial\_Performance

Source: Processed Data, 2024

The results from the partial t-test comparing the leverage variable ( $X_1$ ) and financial performance (Y) reveal a t-value of 1.633, whereas the critical t-value from the t-table is 1.988. Consequently, the obtained t-value of  $1.633 < 1.988$  with a probability value of  $0.106 > 0.05$ , suggesting that leverage does not exert a significant partial influence on financial performance.

Similarly, for this partial t-test between managerial ownership (KM) ( $X_2$ ) and financial performance (Y), the attained t-value stands at 1.537, juxtaposed with the critical t-table value of 1.988. Subsequently, given the t-value of  $1.537 < 1.988$  alongside a significant probability value of  $0.128 > 0.05$ , it can be inferred that managerial ownership lacks a notable partial impact on financial performance.

Regarding the partial t-test analyzing the analysis of the relationship between liquidity ( $X_3$ ) and financial performance (Y) reveals a t-value of 0.832, in comparison to the critical t-table value of 1.988. Consequently, with the t-value of 0.832 being less than 1.988 and a significant probability value of 0.408 exceeding 0.05, it suggests that liquidity does not exert a significant partial influence on financial performance.

Lastly, the partial t-test between firm size ( $X_4$ ) and financial performance (Y) yields a t-value is -1.433, in comparison to the t-table value of 1.988. Therefore, with the obtained t-value of -1.433 being less than 1.988 with a significant probability value of 0.156 surpassing 0.05, it indicates that firm size does not exert a significant partial influence on financial performance.

#### D. CONCLUSION

It is clear from the data analysis and discussion above that there is no discernible relationship between financial performance and the variables of leverage, management ownership, liquidity, and business size.

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