AN ANALYSIS OF THE INFLUENCE OF FINANCIAL RATIOS ON STOCK PRICES OF ENERGY AND MINING COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE

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Abstract

This study investigates the effect of financial ratios on the stock prices of energy and mining companies listed on the Indonesia Stock Exchange (IDX) during the 2021–2024 period. The financial ratios examined include the Current Ratio (CR), Total Asset Turnover (TATO), and Return on Assets (ROA). Utilizing a quantitative descriptive design with multiple linear regression analysis, this study evaluates both the partial and simultaneous impacts of these ratios on stock price movements. The empirical findings demonstrate that ROA exerts a significant positive influence on stock prices, whereas CR and TATO do not exhibit statistically significant partial effects. However, when assessed jointly, the three ratios significantly affect stock prices, accounting for 24.6% of the variation. These results underscore the dominant role of profitability in shaping investor valuation decisions within the energy and mining sectors. The study contributes to the financial literature and offers practical insights for investors in formulating effective investment strategies.

Keywords: Current Ratio; Total Asset Turnover; Return on Assets; Stock Price; Energy Sector; Mining Sector; Indonesia Stock Exchange.

1. Introduction

The findings of this study conclude that although the Current Ratio (CR) and Return on Assets (ROA) significantly influence stock prices, while Total Asset Turnover (TATO) does not, the three ratios collectively contribute to stock price variation, albeit with limited explanatory power due to the strong influence of external macroeconomic conditions. Based on these results, several recommendations are proposed. For investors, it is advisable to apply a two-step screening approach by first selecting companies with an optimal CR range (1.5–3.0) to ensure adequate liquidity without inefficiency, and then prioritizing firms with consistently increasing ROA as an indicator of effective asset utilization and profit generation, while also considering external facto

The focus of this research on analyzing the influence of financial ratios on the stock prices of energy and mining companies is motivated by the high relevance of this issue to current economic conditions. In recent years, the global economy has experienced significant uncertainty, including rising energy prices, fluctuations in commodity markets, and policy transitions toward more sustainable energy sources. These dynamics directly affect the stability and performance of capital markets, particularly within the energy and mining sectors, which play a vital role in Indonesia's economic structure.

This topic is essential to examine because it illustrates how a firm's financial performance measured through indicators such as the Current Ratio (CR), Total Asset Turnover (TATO), and Return on Assets (ROA) can influence stock price movements. Understanding these relationships helps explain how internal financial conditions serve as important signals for investors when assessing firm value and making investment decisions. Recent empirical research, such as the study by Fitria and Sukardi (2024) on the mining sector, demonstrates that financial ratios particularly activity and profitability ratios remain important determinants of stock valuation in industries closely tied to global commodity dynamics, reinforcing the relevance of examining fundamental factors within energy and mining companies.

From an academic standpoint, this study contributes to developing students' and researchers' ability to link accounting and financial management theories with real-world market behavior. Employing statistical analysis strengthens the objectivity of the findings and provides deeper insight into how financial ratios relate to stock prices, especially in strategic sectors such as energy and mining.

Theoretically, this research is grounded in two primary frameworks. Signaling Theory (Spence, 1973) posits that financial information conveys signals about a firm's future prospects. Ratios such as ROA indicate profitability, TATO reflects asset utilization efficiency, and CR represents liquidity strength. Positive performance in these ratios may be interpreted as favorable signals, potentially increasing investor interest and elevating stock prices. Meanwhile, the Efficient Market Hypothesis (Fama, 1970) asserts that stock prices reflect all publicly available information. In modern empirical settings, particularly in commodity-dependent industries, firm fundamentals still play a role in shaping investor expectations even as external market forces such as geopolitical risks and energy price fluctuations influence stock price dynamics.

Research Gap

Although numerous previous studies have examined the relationship between financial ratios and stock prices, their findings remain inconsistent. Some studies report that liquidity ratios such as CR significantly influence stock prices, while others find no such effect. Likewise, mixed results appear regarding TATO some studies highlight its importance in explaining stock price variation, whereas others conclude it has negligible impact. ROA is generally found to affect stock prices positively, yet several studies also document non-significant outcomes depending on industry characteristics and economic cycles. These inconsistencies highlight the need for further investigation, particularly in sectors sensitive to global commodity fluctuations. Therefore, examining energy and mining companies listed on the IDX during the 2021–2024 period is crucial, as this timeframe reflects post-pandemic recovery, volatility in global energy prices, and structural shifts in Indonesia's resource-based industries.

Based on the background and phenomena described above, the research problems can be formulated as follows:

1) *Does the Current Ratio (CR) have a significant effect on stock prices of energy and mining sector companies listed on the Indonesia Stock Exchange during the 2021–2024 period?*
2) *Does the Total Asset Turnover (TATO) have a significant effect on stock prices of energy and mining sector companies listed on the Indonesia Stock Exchange during the 2021–2024 period?*
3) *Does the Return on Assets (ROA) have a significant effect on stock prices of energy and mining sector companies listed on the Indonesia Stock Exchange during the 2021–2024 period?*
4) *Do CR, TATO, and ROA simultaneously have a significant effect on stock prices of energy and mining sector companies listed on the Indonesia Stock Exchange during the 2021–2024 period?*

The objectives of this study are to:

1) *Analyze the effect of the Current Ratio (CR) on stock prices of energy and mining sector companies listed on the Indonesia Stock Exchange during the 2021–2024 period.*
2) *nalyze the effect of the Total Asset Turnover (TATO) on stock prices of energy and mining sector companies listed on the Indonesia Stock Exchange during the 2021–2024 period.*
3) *Analyze the effect of the Return on Assets (ROA) on stock prices of energy and mining sector companies listed on the Indonesia Stock Exchange during the 2021–2024 period.*
4) *Analyze the simultaneous effect of CR, TATO, and ROA on stock prices of energy and mining sector companies listed on the Indonesia Stock Exchange during the 2021–2024 period.*

2. Literature Review and Hypotheses Development

2.1 The Effect of Current Ratio (CR) on Stock Price

The Current Ratio (CR) reflects a company's ability to meet short-term obligations using its current assets. Kasmir (2019) argues that strong liquidity indicates financial stability, which may reduce perceived risk and enhance investor confidence. However, Harahap (2020) notes that excessively high liquidity may suggest inefficient use of current assets, indicating idle funds rather than effective operational management.
Synthesizing these views, liquidity can influence investor perception either positively when it signals stability or negatively when it indicates inefficiency. Therefore, the following hypothesis is proposed:

H1: The Current Ratio (CR) has a positive effect on stock price.

2.2 The Effect of Total Asset Turnover (TATO) on Stock Price

Total Asset Turnover (TATO) measures a firm's efficiency in utilizing its assets to generate revenue. Gitman and Zutter (2015) emphasize that high TATO reflects effective asset usage, which supports better operational performance. Similarly, Kasmir (2019) highlights that efficient asset management can strengthen profitability and attract investor interest.
Prior studies thus converge on the view that higher asset efficiency enhances firm performance, which may be reflected in stock valuation. Based on this synthesis, the hypothesis is stated as follows:

H2: Total Asset Turnover (TATO) has a positive effect on stock price.

2.3 The Effect of Return on Assets (ROA) on Stock Price

Return on Assets (ROA) represents management's effectiveness in generating profits from total assets. Sartono (2018) explains that higher ROA indicates stronger profitability, while Brigham and Houston (2019) assert that profitable firms are more attractive to investors due to better growth prospects and returns.
Empirical findings consistently show that profitability ratios are among the strongest indicators influencing investor decisions and stock valuation. Hence, the hypothesis proposed is:

H3: Return on Assets (ROA) has a positive effect on stock price.

2.4 The Simultaneous Effect of CR, TATO, and ROA on Stock Price

Financial ratios collectively provide a comprehensive picture of a firm's liquidity, operational efficiency, and profitability. Kasmir (2019) and Brigham & Houston (2019) argue that sound financial fundamentals across these dimensions strengthen investor confidence and can positively influence stock price movements.
Given that liquidity, efficiency, and profitability interact to shape firm value, it is expected that these ratios jointly affect stock valuation. Therefore:

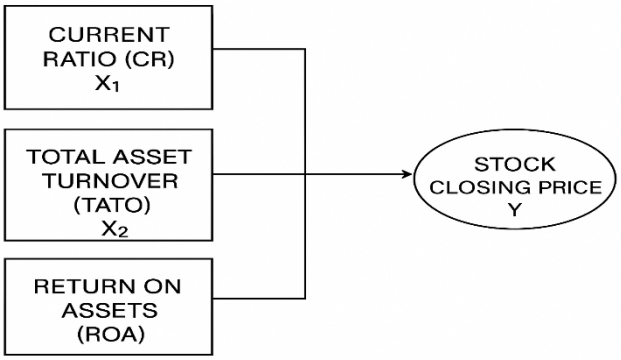
H4: Current Ratio (CR), Total Asset Turnover (TATO), and Return on Assets (ROA) simultaneously have a positive effect on stock price.

2.5 Operational Hypotheses

To test the proposed relationships empirically, the operational hypotheses are formulated as follows:

Hypothesis Code	*Null Hypothesis (H_0)*	*Alternative Hypothesis (H_1)*
H1	*Current Ratio (CR) has no significant effect on stock price.*	*Current Ratio (CR) has a significant effect on stock price.*
H2	*Total Asset Turnover (TATO) has no significant effect on stock price.*	*Total Asset Turnover (TATO) has a significant effect on stock price.*
H3	*Return on Assets (ROA) has no significant effect on stock price.*	*Return on Assets (ROA) has a significant effect on stock price.*
H4	*Current Ratio (CR), Total Asset Turnover (TATO), and Return on Assets (ROA) simultaneously have no significant effect on stock price.*	*Current Ratio (CR), Total Asset Turnover (TATO), and Return on Assets (ROA) simultaneously have a significant effect on stock price.*

2.6 Research Model Diagram



3. Research Methodology

3.1 Type of Research

This study is classified as a quantitative research employing an associative method, which focuses on identifying the relationship or effect between two or more variables. Specifically, this research aims to analyze how the Current Ratio (CR), Total Asset Turnover (TATO), and Return on Assets (ROA) influence stock prices of companies in the energy and mining sectors listed on the Indonesia Stock Exchange (IDX).

3.2 Research Location and Period

This study utilizes secondary data obtained from the annual financial reports of companies in the energy and mining sectors listed on the Indonesia Stock Exchange (IDX), which were accessed through the official website www.idx.co.id . The research was conducted in 2025, covering financial data from the period 2021 to 2024.

3.3 Type and Source of Data

The information utilized in this research is secondary data, which refers to data collected indirectly from existing documents or official sources. The data sources were obtained from:

1) *Annual financial reports of energy and mining sector companies listed on the Indonesia Stock Exchange (IDX).*
2) *The official IDX website and other supporting platforms such as Yahoo Finance and IDN Financials.*
3) *Relevant references, including literature, journals, and books related to the research variables.*

3.4 Population and Sample

a. Research Population

The research population comprises all energy and mining sector companies listed on the Indonesia Stock Exchange (IDX) during the period 2021–2024. According to data retrieved from the official IDX website, there are 63 companies categorized within this sector, including those engaged in energy, oil and gas, coal, minerals, and metal mining industries.

b. Sampling Technique

This study employs a purposive sampling technique, which involves selecting samples based on specific criteria aligned with the research objectives. This method ensures that the selected sample accurately represents companies relevant to the study's focus. The sample criteria are as follows:

1) *Companies in the energy and mining sector that were continuously listed on the IDX from 2021 to 2024.*
2) *Companies that published complete annual financial reports during the observation period.*
3) *Companies with complete data related to the variables Current Ratio (CR), Total Asset Turnover (TATO), Return on Assets (ROA), and stock price.*
4) *Companies that disclosed exchange rate data in their financial statements.*
5) *Companies that did not experience extreme losses or contain anomalous data that could distort the statistical results.*

c. Research Sample

Based on the established criteria, out of the total 63 companies in the population, 27 companies met all the required conditions. Considering the four-year observation period (2021–2024), the total number of observations used in this study is:
27 companies × 4 years = 108 observation units.

Table 1. List of Sample Companies in the Energy and Mining Sector Listed on IDX (2021–2024)

NO	COMPANY NAME	CODE	YEAR
1	Batu Licin Nusantara Marintim Tbk	BESS	2021- 2024
2	Exploitasi Energy Indonesia	CNKO	2021- 2024
3	Derma Henwa Tbk	DEWA	2021- 2024
4	PT Buma Internasional Grup Tbk	DOID	2021- 2024
5	Elnusa Tbk	ELSA	2021- 2024
6	Alfa Energi Investama Tbk	FIRE	2021- 2024
7	GTS International Tbk	GTSI	2021- 2024
8	Indika Energy Tbk	INDY	2021- 2024
9	Indah Prakasa Sentosan Tbk	INPS	2021- 2024
10	Resources Alam Indonesia Tbk	KKGI	2021- 2024
11	Mitra Energy Persada Tbk	KOPI	2021- 2024
12	Logindo Samudramakmur Tbk	LEAD	2021- 2024
13	Mitrabara Adiperdana Tbk	MBAP	2021- 2024
14	Medco Energy Internasional Tbk	MEDC	2021- 2024
15	Perusahaan Gas Negara Tbk	PGAS	2021- 2024
16	Pelita Samudera Shipping Tbk	PSSI	2021- 2024
17	Rukun Raharja Tbk	RAJA	2021- 2024
18	RMK Energy Tbk	RMKE	2021- 2024
19	Radiant Utama Interinsco Tbk	RUIS	2021- 2024
20	Sumber Global Energy Tbk	SGER	2021- 2024
21	Sillio Maritiem Perdana Tbk	SHIP	2021- 2024
22	Golden Eagle Energy Tbk	SMMT	2021- 2024
23	SMR Utama Tbk	SMRU	2021- 2024
24	Soech Lines Tbk	SOCI	2021- 2024
25	Pelayaran Tamarin Samudra Tbk	TAMU	2021- 2024
26	TBS Energy Utama Tbk	TOBA	2021- 2024
27	Ulima Nitra Tbk	UNIQ	2021- 2024

Source: Processed data from annual reports of energy and mining companies listed on the Indonesia Stock Exchange (IDX), 2021–2024.

3.5 Variables and Measurement Instruments

This study aims to examine the extent to which financial ratios influence stock prices of energy and mining sector companies listed on the Indonesia Stock Exchange (IDX). Two types of variables are used in this research: independent variables and dependent variables.

Table 2. Operational Definition of Variables

Variable	Operational Definition	Formula	Scale	Data Source
Current Ratio (CR)	The company's ability to meet its short-term obligations using current assets.	Current Assets / Current Liabilities	Ratio	IDX Financial Statements
Total Asset Turnover (TATO)	The efficiency of asset utilization in generating sales.	Sales / Total Assets	Ratio	IDX Financial Statements
Return on Assets (ROA)	The company's ability to generate profit from total assets.	Net Income / Total Assets	Ratio	IDX Financial Statements
Stock Price	The company's annual market share value.	Closing Price at Year-End	Ratio	Indonesia Stock Exchange (IDX)

Source: Processed data from annual financial statements of energy and mining companies listed on the Indonesia Stock Exchange (IDX), 2021–2024.

Relationship Between Variables

In this study, Current Ratio (CR), Total Asset Turnover (TATO), and Return on Assets (ROA) serve as independent variables that are presumed to influence stock price as the dependent variable. Logically, companies with high liquidity (CR), optimal asset utilization efficiency (TATO), and strong profitability (ROA) are generally perceived positively by investors, which can potentially drive an increase in stock prices. This study aims to analyze both the partial and simultaneous effects of these financial ratios on stock prices using secondary data obtained from the companies' annual financial reports.

3.6 Research Model

This research model illustrates the relationship between the independent variables and the dependent variable.

Research Variables:
Independent Variables (X):
Current Ratio (CR) → X_1
Total Asset Turnover (TATO) → X_2
Return on Assets (ROA) → X_3

Dependent Variable (Y):
Stock Price → Y

3.7 Model Description

CR (X_1): Measures the company's liquidity. A strong liquidity position indicates the firm's ability to meet short-term obligations, thereby increasing investor confidence.

TATO (X_2): Measures the efficiency of asset utilization in generating sales. High efficiency typically attracts investors as it reflects effective management performance.

ROA (X_3): Measures the company's profitability derived from total assets. A higher ROA indicates that the company can generate profits efficiently, which positively impacts stock prices.

Stock Price (Y): Represents the market value of a company's shares, which is influenced by its financial performance.

4. Result

4.1 Descriptive Statistics Results

Table 3 Descriptive Statistics

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
CR	108	,086512750619387	5,357850982318075	1,561130521702019	,973902623947412
TATO	108	,023240698702045	3,182798189779307	,811822861512953	,634507079397404
ROA	108	-,229858404251139	,585199711010132	,050195835683463	,117897766592667
HARGA SAHAM	108	2,197224577336220	8,939187601475613	5,737089942816103	1,339776011341108
Valid N (listwise)	108				

Source: Processed data using SPSS, 2025.

Based on the results of the descriptive statistical analysis in the table above, a total of 108 observations were used in this study, covering four main variables: Current Ratio (CR), Total Asset Turnover (TATO), Return on Assets (ROA), and Stock Price.

1) Current Ratio (CR)

The mean value of 1.56 indicates that, on average, companies possess current assets 1.56 times greater than their current liabilities. This suggests that, in general, the companies are able to meet their short-term obligations adequately. The minimum value of 0.08 indicates a company with low liquidity, while the maximum value of 5.36 represents a company with a very strong liquidity position. The standard deviation of 0.97 reflects a relatively high variation among companies in their ability to meet short-term liabilities.

2) Total Asset Turnover (TATO)
The average TATO value of 0.81 indicates that each rupiah of total assets generates sales of 0.81 rupiah. This figure suggests that asset utilization efficiency among companies is moderate. The minimum value of 0.02 shows the existence of companies that are less efficient in utilizing their assets, whereas the maximum value of 3.18 indicates companies that are highly effective in generating sales from their assets. The standard deviation of 0.63 implies substantial differences in efficiency levels across companies.

3) Return on Assets (ROA)
The mean ROA value of 0.05 or 5% demonstrates that, on average, companies are able to generate a net profit equivalent to 5% of their total assets. The minimum value of -0.23 reflects the presence of companies experiencing losses, while the maximum value of 0.58 shows that some companies are highly profitable. The standard deviation of 0.12 indicates considerable variation in profitability among firms.

4) Stock Price
The average stock price value of 5.74 (in natural log) represents the central tendency of stock prices among energy and mining companies during the observation period. The minimum value of 2.20 and maximum value of 8.94 indicate a wide range of stock price levels. The standard deviation of 1.34 signifies that stock price fluctuations among companies were quite substantial during the research period.

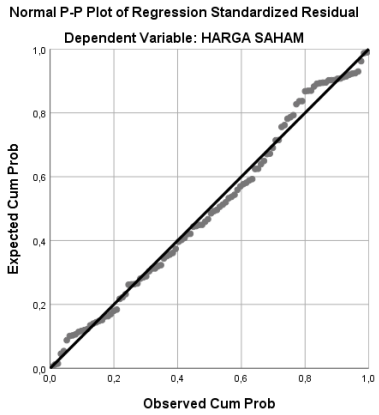
Interpretative Conclusion
Overall, the descriptive statistical analysis reveals that:

- *a) Companies in the energy and mining sectors generally demonstrate strong liquidity (high CR);*
- *b) However, asset efficiency (TATO) and profitability (ROA) vary significantly across firms;*
- *c) Stock prices also exhibit high volatility, reflecting differences in company performance and market perception among firms in the sector.*

4.2 Classical Assumption Tests

A. Normality Test

Table 4 Results of the Normal Probability Plot (P–P Plot) Test



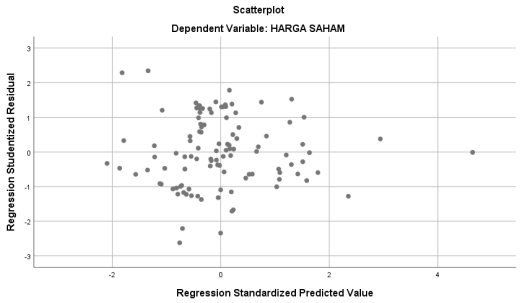
Source: Authors' calculation based on processed data using IBM SPSS Statistics 25 (2025).

Table 1.1 presents the Normal Probability Plot (P–P Plot), which serves as a diagnostic tool to assess whether the residuals in the regression model follow a normal distribution pattern. According to Ghozali (2018), the normality test aims to verify whether the residuals—representing the random error components in the regression model—are normally distributed.

A distribution is considered normal if the data points in the P–P Plot are scattered closely around the diagonal line and tend to follow its direction. This indicates that the residuals do not deviate significantly from the expected normal distribution.

Based on the interpretation of Table 4 the data points appear to cluster around the diagonal line, indicating that the residuals are approximately normally distributed. Therefore, it can be concluded that the normality assumption of the regression model is satisfactorily fulfilled.

Table 5 Scatterplot of Standardized Residuals



Source: Authors' calculation based on processed data using IBM SPSS Statistics 25 (2025).

The scatterplot illustrates the relationship between standardized residuals (on the Y-axis) and standardized predicted values (on the X-axis) derived from the regression model. Its purpose is to identify whether a specific pattern exists in the residual distribution, which may provide insights into the data characteristics. According to Gujarati and Porter (2012), the residual scatterplot serves as a visual instrument to evaluate the assumptions of homoscedasticity and autocorrelation, while also reinforcing the validity of the normality test results. The ideal condition is achieved when data points are randomly dispersed around the zero axis without forming any discernible pattern, indicating that the residuals are stochastic and the data distribution aligns with the principles of normality.

Based on the interpretation of Table 5 the points in the scatterplot are randomly distributed and do not exhibit any clear pattern. Therefore, it can be concluded that the data satisfy the normality assumption and do not display significant heteroscedasticity.

Table 6 Results of the Normality Test (Kolmogorov–Smirnov Test)

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		*108*
Normal Parameters[a,b]	*Mean*	*,0000000*
	Std. Deviation	*1,14699943*
Most Extreme Differences	*Absolute*	*,075*
	Positive	*,045*
	Negative	*-,075*
Test Statistic		*,075*
Asymp. Sig. (2-tailed)		*,167[c]*

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Source: Authors' computation based on processed data using IBM SPSS Statistics 25 (2025).

This table presents the results of the Kolmogorov–Smirnov (K–S) statistical test, which aims to evaluate whether the distribution of residuals follows a normal pattern. The key parameter observed in this analysis is the Asymp. Sig. (2-tailed) value, which serves as a statistical decision indicator.

According to Santoso (2019), the residual data are considered normally distributed if the Asymp. Sig. value is greater than 0.05; conversely, if the value is less than 0.05, the residuals do not meet the normality assumption. This criterion assists in verifying the reliability of the fundamental assumptions in the regression model.

Based on the interpretation of Table 6, the Asymp. Sig. (2-tailed) value is recorded at 0.167, which exceeds the threshold of 0.05. This indicates that the residuals are normally distributed. Therefore, the normality assumption is satisfied, and the regression model is deemed valid and suitable for further analysis.

B. Multicollinearity Test

Table 7 Results of the Multicollinearity Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	4,823	,275		17,515	,000		
	CR	,324	,139	,236	2,340	,021	,695	1,439
	TATO	,295	,190	,140	1,554	,123	,871	1,148
	ROA	3,346	1,210	,294	2,764	,007	,621	1,610

a. Dependent Variable: Stock Price

Source: Authors' computation based on processed data using IBM SPSS Statistics 25 (2025).

The multicollinearity test is designed to identify whether there are significant correlations among the independent variables specifically Current Ratio (CR), Total Assets Turnover (TATO), and Return on Assets (ROA) within the regression model framework. A high correlation among independent variables can compromise the accuracy and reliability of regression estimates. According to Ghozali (2018), an optimal regression model should be free from multicollinearity issues to ensure the validity of the analysis.

The primary indicators used to assess multicollinearity include:
Tolerance values greater than 0.10, and
Variance Inflation Factor (VIF) values less than 10.00.
If both criteria are met, the regression model can be considered free from multicollinearity, maintaining the integrity of the regression assumptions.

Based on the interpretation of Table 7, the results are as follows:
CR: Tolerance = 0.695, VIF = 1.439
TATO: Tolerance = 0.871, VIF = 1.148
ROA: Tolerance = 0.621, VIF = 1.610

All tolerance values exceed 0.10, and all VIF values are below 10.00. Therefore, it can be concluded that there is no multicollinearity among the independent variables, confirming that the regression model is appropriate for further statistical analysis.

C. Heteroskedasticity Test

Table 8 Results of the Heteroskedasticity Test (Glejser Test)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	1,121	,155		7,218	,000		
	CR	,005	,078	,007	,061	,951	,695	1,439
	TATO	-,204	,107	-,193	-1,904	,060	,871	1,148
	ROA	-,740	,683	-,130	-1,084	,281	,621	1,610

a. Dependent Variable: ABS_RES

Source: Authors' computation based on processed data using IBM SPSS Statistics 25 (2025).

The heteroskedasticity test is conducted to determine whether the variance of the residuals (or errors) in the regression model remains constant or fluctuates, as such variations can affect the efficiency and accuracy of the regression estimates. When the variance of the residuals is not constant (i.e., heteroskedasticity is present), the interpretation of the regression coefficients becomes less reliable and the model's predictive power may decline.

According to Santoso (2019), one of the commonly used methods to detect heteroskedasticity is the Glejser test, in which the absolute residuals (ABS_RES) are regressed against the independent variables to identify patterns of variance inconsistency. The decision criteria for this test are as follows:

If the significance value (Sig.) is greater than 0.05, the model is considered free from heteroskedasticity.

If the significance value is less than 0.05, heteroskedasticity is detected, indicating variance irregularities among residuals.

Based on the results presented in Table 8, the significance values for each variable are:
CR: Sig. = 0.951
TATO: Sig. = 0.060
ROA: Sig. = 0.281

All significance values exceed the 0.05 threshold. Therefore, it can be concluded that no heteroskedasticity exists in the regression model, confirming that the model satisfies the classical assumption of homoscedasticity and is reliable for further analysis.

D. Autocorrelation Test

Table 9 Results of the Autocorrelation Test (Durbin–Watson Test)

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,382[a]	,146	,121	,92510	1,844

a. Predictors: (Constant), ROA, TATO, CR

b. Dependent Variable: STOCK PRICE

Source: Authors' computation based on processed data using IBM SPSS Statistics 25 (2025).

The autocorrelation test is conducted to determine whether there is a correlation between the residuals (errors) in the regression model at time t and those at the previous time period (t–1). The presence of autocorrelation can introduce bias into the estimation of regression coefficients and reduce their reliability; therefore, it must be identified and addressed appropriately.

According to Gujarati and Porter (2012), one of the most effective methods for detecting autocorrelation is the Durbin–Watson (DW) test, with the following decision criteria:

If the value of DW falls within the range Du < DW < 4 – Du, the model is considered free from autocorrelation.
If DW < Dl, positive autocorrelation is indicated.
If DW > 4 – Dl, negative autocorrelation is indicated.

Based on the test results presented in Table 9, the following values were obtained:
DW = 1.844
Du = 1.7437
4 – Du = 2.2563

Since the DW value (1.844) lies between Du (1.7437) and 4 – Du (2.2563), or 1.7437 < 1.844 < 2.2563, it can be concluded that the regression model is free from autocorrelation. This finding confirms that the assumption of error independence is satisfied, ensuring that the model is statistically sound and suitable for further analysis.

4.3 Hypothesis Testing Results

This study was designed to investigate the impact of the Current Ratio (CR), Total Asset Turnover (TATO), and Return on Assets (ROA) on Stock Prices, both individually (partial analysis) and collectively (simultaneous analysis), among energy and mining companies listed on the Indonesia Stock Exchange (IDX). The analysis aims to provide insights into the causal relationship between these financial ratios and stock performance, taking into account the specific characteristics of the industry.

The results of the multiple linear regression analysis, including the estimated coefficients and the statistical significance of each independent variable, are presented in the relevant SPSS output tables. These tables serve as the empirical basis for assessing the strength, direction, and significance of the effects under investigation, thereby supporting a comprehensive interpretation of the model's validity and explanatory power.

Tabel 10 Multiple Linear Regression Model

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	4,823	,275		17,515	,000		
	CR	,324	,139	,236	2,340	,021	,695	1,439
	TATO	,295	,190	,140	1,554	,123	,871	1,148
	ROA	3,346	1,210	,294	2,764	,007	,621	1,610

a. Dependent Variable: STOCK PRICE

Source: Authors' computation based on processed financial data of energy and mining companies listed on the IDX (2021–2024), analyzed using IBM SPSS Statistics 25 (2025).

Y = a + b1 + b2X2 + b3X3
Stock Price = 4,823 + 0,324 (CR) + 0,295 (TATO) + 3,346 (ROA)

This model examines the effect of Current Ratio (CR), Total Asset Turnover (TATO), and Return on Assets (ROA) on Stock Prices among energy and mining companies listed on the Indonesia Stock Exchange (IDX). Based on the results of the multiple linear regression analysis obtained from the SPSS output, the influence of the independent variables was tested both partially (t-test) and simultaneously (F-test). The following discussion provides a detailed interpretation of the hypothesis testing results, supported by relevant literature and contextual factors influencing stock price variability.

a) The Effect of Current Ratio (CR) on Stock Price
The statistical results show that the Current Ratio (CR) exerts a positive and significant influence on stock prices, indicating that liquidity plays an important role in shaping investor perceptions in the energy and mining sectors. A strong liquidity position suggests that the firm is capable of meeting its short-term obligations without financial distress, thereby reducing perceived risk. In industries

characterized by high operational uncertainty—such as fluctuating commodity prices, capital-intensive operations, and exposure to global energy markets—investors tend to value companies that exhibit financial resilience and adequate working capital management.

This interpretation aligns with Putri and Wulandari (2021), who found that liquidity strengthens investor confidence, and with Rahayu (2020), who emphasized that strong liquidity positions improve market valuation. Brigham and Houston (2019) also note that liquidity ratios signal the firm's ability to withstand short-term shocks, which is particularly relevant for sectors with volatile cash flows such as energy and mining.

Thus, CR's significant effect reflects not only statistical relevance but also economic significance, demonstrating that investors in this sector consider liquidity a crucial indicator of operational stability.

b) The Effect of Total Asset Turnover (TATO) on Stock Price

The analysis reveals that TATO does not significantly influence stock prices. This finding suggests that asset efficiency, although important operationally, is not a primary consideration for investors in valuing companies in the energy and mining sectors. These industries typically operate with very high levels of fixed assets such as heavy machinery, extraction equipment, and long-term infrastructure which naturally result in lower turnover ratios relative to other sectors.

Given this structural characteristic, even substantial changes in TATO may not immediately translate into improved profitability or investor valuation. Investors in these sectors tend to focus more heavily on profitability indicators (e.g., ROA) and liquidity, rather than asset turnover, because operational constraints and long investment cycles limit the impact of asset utilization on short-term financial performance.

This result is consistent with Sari and Nugraha (2022), who found that TATO does not always correspond with stock price movements in asset-intensive industries. However, the contrast with Susanto (2021) suggests that the influence of TATO is industry-specific, becoming more relevant in sectors where assets can be rapidly converted into revenue. Van Horne and Wachowicz (2018) similarly emphasize that activity ratios measure managerial efficiency but only influence market valuation if accompanied by meaningful profitability gains.

Therefore, the insignificance of TATO in this study underscores that investors in energy and mining companies prioritize profitability and liquidity over asset efficiency, given the inherent characteristics of these industries.

c) The Effect of Return on Assets (ROA) on Stock Price

ROA is found to have a positive and statistically significant effect on stock prices, reaffirming profitability as the most influential financial ratio in this study. A higher ROA signals that the company is generating greater earnings from its asset base, reflecting strong cost management and effective operational performance. In sectors with high capital requirements, such as energy and mining, improvements in ROA are difficult to achieve; therefore, when profitability increases, it is regarded as a strong indicator of managerial effectiveness and operational success.

This finding resonates with Wijayanti (2020), who documented the significant role of profitability in influencing stock prices within the energy sector. Pratiwi and Mahardika (2021) further emphasize that profitability is a key criterion in investment decision-making, as it reflects both current performance and future growth potential. Gitman and Zutter (2015) highlight that ROA represents the firm's ability to convert asset investment into net income, making it a central measure of financial performance.

Beyond statistical significance, the economic implication is clear: profitability remains the dominant consideration for investors, especially in industries where operational risks, market volatility, and capital intensity are pronounced. As a result, firms with higher ROA are likely to attract more investor interest, generating upward pressure on stock prices.

Table 11 F-Test Results: The Simultaneous Effect of CR, TATO, and ROA on Stock Prices

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	51,295	3	17,098	12,632	,000[b]
	Residual	140,770	104	1,354		
	Total	192,065	107			

a. Dependent Variable: STOCK PRICE

b. Predictors: (Constant), ROA, TATO, CR

Source: Authors' computation based on processed financial data of energy and mining companies listed on the IDX (2021–2024), analyzed using IBM SPSS Statistics 25 (2025).

The F-test results indicate a significance value of 0.000, confirming that the model incorporating the Current Ratio (CR), Total Asset Turnover (TATO), and Return on Assets (ROA) jointly has a significant influence on stock prices. This implies that investors do not assess these financial ratios in isolation; rather, they evaluate a firm's liquidity, operational efficiency, and profitability as an integrated measure of overall financial health when determining its market value.

In the context of Indonesia's energy and mining sectors industries characterized by high capital intensity, exposure to global commodity price movements, and substantial operational risks this collective significance is particularly relevant. Strong liquidity (CR) indicates that the company can sustain operations amid volatile cash flows, profitability (ROA) reflects its ability to generate returns from large asset bases, and activity ratios (TATO) signal the efficiency of asset utilization. When these components strengthen simultaneously, they provide a comprehensive picture of financial stability and operational resilience, which is highly valued by investors in these sectors.

This interpretation aligns with Handayani and Putra (2021), who found that CR, TATO, and ROA collectively influenced stock prices in the mining sector, emphasizing the importance of evaluating financial ratios holistically. Furthermore, Mulyono (2020) demonstrated similar results in the energy sector, reinforcing the idea that fundamental financial indicators, when considered together, provide stronger explanatory power for stock price movements than when assessed individually.

Overall, the simultaneous significance of CR, TATO, and ROA reflects the economic reality that investors rely on multi-dimensional financial assessments to anticipate firm performance in capital-intensive and commodity-dependent industries such as energy and mining.

Table 12 Coefficient of Determination (R^2)

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,517[a]	,267	,246	1,163425076678173	,826

a. Predictors: (Constant), ROA, TATO, CR
b. Dependent Variable: STOCK PRICE
Source: Authors' computation based on processed financial data of energy and mining companies listed on the IDX (2021–2024), analyzed using IBM SPSS Statistics 25 (2025).

The Adjusted R Square value of 0.246 indicates that the Current Ratio (CR), Total Asset Turnover (TATO), and Return on Assets (ROA) collectively explain 24.6% of the variation in stock prices, while the remaining 75.4% is attributable to external factors not captured in the model. This relatively modest explanatory power suggests that during the 2021–2024 period, stock price movements in the energy and mining sectors were driven more strongly by macroeconomic and industry-specific conditions than by internal financial performance.

This finding is consistent with the turbulent economic environment characterizing the study period. The post-pandemic recovery in 2021–2022 was marked by uncertain global demand and shifting energy consumption patterns, placing greater emphasis on market sentiment and government interventions rather than firm-level liquidity or operational metrics. The 2022 Russia–Ukraine geopolitical crisis further amplified volatility in global coal and oil prices, making stock valuations in Indonesian energy and mining companies particularly sensitive to international commodity shocks rather than to internal financial ratios.

Similarly, Bank Indonesia's interest rate hikes throughout 2022–2023 implemented in response to global inflationary pressures triggered capital flow volatility and heightened investor risk aversion. During this period, external financial conditions, especially monetary policy and foreign investor sentiment, played a dominant role in determining stock price dynamics. Moreover, the increasing attention to energy transition policies and Environmental, Social, and Governance (ESG) criteria in 2023–2024 shifted investment flows away from certain extractive industries, further reducing the direct influence of company-specific financial indicators on stock prices.

Taken together, these findings indicate that although CR, TATO, and ROA contribute to explaining stock price variations, their impact remains limited within a sector heavily influenced by commodity cycles, policy regimes, and global economic conditions. This

interpretation aligns with Sartono (2020) and Nurfadillah and Widodo (2022), who highlight that macroeconomic forces and international market developments exert a stronger influence on stock valuations in the mining and energy sectors than internal financial ratios.

Accordingly, future stock price prediction models would benefit from incorporating broader external variables such as commodity price indices, monetary policy indicators, and geopolitical risk factors to enhance explanatory power and practical relevance.

5. Discussions and Conclusions

Based on the findings of this study examining the influence of the Current Ratio (CR), Total Asset Turnover (TATO), and Return on Assets (ROA) on stock prices among energy and mining companies listed on the Indonesia Stock Exchange (IDX) during the 2021–2024 period, several conclusions can be drawn as follows:

The Current Ratio (CR) has a positive and significant effect on stock prices. This result indicates that the higher a company's ability to meet its short-term obligations, the greater the investors' confidence in its financial stability. Such confidence tends to increase the demand for the company's shares, ultimately leading to a rise in stock prices. This finding aligns with liquidity theory (Kasmir, 2019), which states that a strong liquidity position reflects sound financial health and reduces the risk of default, thus enhancing investor trust.

The Total Asset Turnover (TATO) shows no significant effect on stock prices. This suggests that efficiency in asset utilization to generate sales is not the primary consideration for investors when making investment decisions. Instead, investors tend to place greater emphasis on profitability rather than operational efficiency alone. This outcome supports the view of Harahap (2020), who argued that activity ratios do not always directly influence investors' perceptions of firm value.

The Return on Assets (ROA) has a positive and significant influence on stock prices. This implies that the more effectively a company generates profits from its assets, the greater its attractiveness to investors. ROA reflects managerial effectiveness in utilizing assets to generate earnings (Horne & Wachowicz, 2016). Therefore, companies that consistently maintain profitability are perceived as more valuable, thereby positively influencing their stock prices.

Simultaneously, CR, TATO, and ROA collectively have a significant impact on stock prices. This finding demonstrates that the combination of liquidity, asset utilization efficiency, and profitability provides a more comprehensive picture of a company's financial performance. In accordance with Signaling Theory (Spence, 1973), strong financial performance sends a positive signal to the market, enhancing investor confidence and stimulating an increase in stock prices.

In summary, this study concludes that fundamental financial factors, particularly liquidity and profitability, play a crucial role in determining stock price movements in the energy and mining sectors. These results reinforce the notion that sound financial management and profitability optimization remain essential determinants of firm value in capital markets.

6. Limitations of Research

The findings of this study conclude that although the Current Ratio (CR) and Return on Assets (ROA) significantly influence stock prices, while Total Asset Turnover (TATO) does not, the three ratios collectively contribute to stock price variation, albeit with limited explanatory power due to the strong influence of external macroeconomic conditions. Based on these results, several recommendations are proposed.

For investors, it is advisable to apply a two-step screening approach by first selecting companies with an optimal CR range (1.5–3.0) to ensure adequate liquidity without inefficiency, and then prioritizing firms with consistently increasing ROA as an indicator of effective asset utilization and profit generation, while also considering external factors such as commodity prices, interest rates, and energy policy dynamics.

For companies, efforts should be directed toward improving profitability through cost efficiency and optimizing asset use, maintaining healthy liquidity, and aligning strategic decisions with energy transition policies and ESG practices to strengthen long-term competitiveness.

For academics and future researchers, further studies should incorporate additional financial variables (DER, EPS, PBV, ROE) and macroeconomic indicators (oil prices, exchange rates, interest rates, inflation), extend the observation period, and broaden sectoral coverage to enhance model comprehensiveness.

For government and capital market regulators, strengthening macroeconomic stability, supporting energy transition policies, and improving the transparency and accessibility of corporate disclosures are essential to enhance market efficiency and investor confidence. This study also acknowledges key limitations, including the restricted number of variables, sector-specific focus, limited time frame covering a volatile

post-pandemic period, and reliance on secondary data, which future research is encouraged to address for more robust and generalizable findings.

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