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Impact of Current Ratio (CR), ROA, and ROE on Coal Subsector Stock Returns, IDX 2020–2023

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Abstract: This study investigates whether Current Ratio (CR), Return on Assets (ROA), and Return on Equity (ROE) explain stock returns of coal-subsector firms listed on the Indonesia Stock Exchange (IDX) during 2020–2023, a period of heightened energy-market volatility. Using an associative quantitative design, secondary data were compiled from issuers audited annual financial statements and stock price records. Multiple linear regression was estimated and evaluated using classical assumption tests (normality, multicollinearity, autocorrelation, and heteroscedasticity). After data screening, 14 firm-year observations were retained. The joint effect of CR, ROA, and ROE on stock returns was not statistically significant (F-test p=0.128). In partial tests, CR and ROA were insignificant, whereas ROE showed a positive and significant association with stock returns (p=0.047). The adjusted R-squared of 0.245 indicates that the ratios explain 24.5% of overall return variation, suggesting a substantial role for external drivers such as coal prices, macroeconomic conditions, policy, and market sentiment. Practically, the findings imply that equity profitability is a more informative screening metric than short-term liquidity or asset efficiency for investors assessing coal equities in Indonesia.

Keywords: Current Ratio, Return on Assets, Return on Equity, Stock Return, Coal Subsector

Abstrak: Penelitian ini menguji apakah Current Ratio (CR), Return on Assets (ROA), dan Return on Equity (ROE) mampu menjelaskan return saham emiten subsektor batubara yang tercatat di Bursa Efek Indonesia (BEI) selama 2020–2023, ketika pasar energi mengalami volatilitas tinggi. Desain yang digunakan adalah kuantitatif asosiatif dengan data sekunder dari laporan keuangan tahunan auditan dan data harga saham dari publikasi resmi. Analisis dilakukan dengan regresi linear berganda dan didukung uji asumsi klasik (normalitas, multikolinearitas, autokorelasi, dan heteroskedastisitas). Setelah penyaringan data, diperoleh 14 observasi firm-year. Hasil uji F menunjukkan CR, ROA, dan ROE secara simultan tidak berpengaruh signifikan terhadap return saham (p=0,128). Secara parsial, CR dan ROA tidak signifikan, sedangkan ROE berpengaruh positif dan signifikan terhadap return saham (p=0,047). Nilai adjusted R^2 sebesar 0,245 mengindikasikan variabel penelitian hanya menjelaskan 24,5% variasi return, sehingga faktor eksternal seperti harga batubara, kondisi makroekonomi, kebijakan, dan sentimen pasar masih dominan. Secara akademik, hasil ini memperkuat bukti bahwa pada sektor komoditas, profitabilitas berbasis ekuitas lebih cepat tercermin dalam harga saham dibanding rasio likuiditas dan profitabilitas aset.

Kata Kunci: Rasio Lancar, Pengembalian atas Aset, Pengembalian atas Ekuitas, Return Saham, Subsektor Batubara

INTRODUCTION

Stock price fluctuations are often the main focus of investors because they reflect the dynamics of the business world and the economy as a whole. For some investors, this uncertainty is seen as a risk, but for others it is an opportunity to make a profit. Of the various investment instruments available, stocks are still the favorite choice because they offer relatively high return potential compared to other instruments.

The capital market has an important role in providing investment alternatives for the public and being a means of raising funds for companies. One of the investment instruments that is in great demand is stocks, because it has the potential to provide profits in the form of dividends and capital gains. These two components conceptually form stock returns, which are the main measure for investors in evaluating investment returns. However, stock returns are volatile and influenced by various factors, both internal such as the company's financial performance, and external factors such as macroeconomic conditions, government policies, and global commodity price dynamics. This condition requires investors to consider various fundamental indicators before making investment decisions (Hidayat & Rikumahu, 2025).

One of the sectors that shows the characteristics of real stock return fluctuations is the mining sector, especially the coal subsector, which is greatly influenced by global commodity price dynamics. The coal sub-sector is one of the main contributors to the Indonesian economy with a strategic role as the main source of energy for steam power plants (PLTU) and important raw materials for various industries (Clark et al., 2020). Indonesia is also listed as one of the largest producers and exporters of coal in the world, with the main market in the Asian region. Despite its promising prospects, this subsector has a high level of volatility due to fluctuations in the benchmark coal price (HBA), the transition to renewable energy, and trade and environmental policies (Manurung et al., 2024). This volatility is reflected in the movement of coal issuers' stock returns on the Indonesia Stock Exchange (IDX) which in the 2020–2023 period showed significant changes from year to year.

Table 1. Stock Return

Company Name	Stock return			
	2020	2021	2022	2023
PT Alamtri Resources Tbk	-112	106	125	69
PT Bukit Asam Tbk	318	27	170	12
PT Indika Energy Tbk	116	-083	110	83
PT Golden Energy Mines Tbk	0	170	0	13
PT Bumi Resources Tbk	100	100	100	100
PT Transcoal Pacific Tbk	101	100	100	100
PT Dian Swantika Sentosa Tbk	100	100	100	100
PT Sumber Global Energy Tbk	212	123	98	105
PT Mitrabara Adiperdana Tbk	86	158	125	68
PT Harum Energy Tbk	102	96	7	100

Source: secondary data (processed)

This volatility is reflected in the movement of coal issuers' stock returns on the Indonesia Stock Exchange (IDX) during 2020–2023, which changed substantially from year to year. For example, PT Bukit Asam Tbk recorded a sharp increase of 318% in 2020 but fell to 12% in 2023, while PT Indika Energy Tbk moved from 116% (2020) to -83% (2021). In contrast, PT Bumi Resources Tbk and PT Transcoal Pacific Tbk appeared relatively stable at around 100%, indicating more consistent operational or policy conditions. These patterns strengthen the need to evaluate internal corporate factors that may influence returns, including through financial ratio analysis.

In the broader energy-finance literature, commodity price shocks are also documented as an important driver of stock market returns and can work through channels such as investor sentiment (Liu et al., 2024). In the Indonesian context, fluctuating commodity prices have been shown to affect volatility and financial performance among coal-related firms (Sianturi, 2024). These findings support the argument that, alongside external commodity dynamics, firm fundamentals remain relevant for investors when assessing expected returns in commodity-based sectors.

Financial ratio analysis, such as current ratio (CR), return on assets *(ROA), and* return on equity (ROE), often used to assess a company's performance from various aspects. CR measures a company's ability to meet short-term obligations, ROA assesses the effectiveness of asset use in generating profits, and ROE measures the ability to generate profits from the equity it owns. These three indicators provide an important picture of the company's financial health which can affect investor confidence and ultimately impact stock returns (Harinurdin, 2023).

Although there have been many studies that discuss the relationship between financial ratios and stock returns, the findings show inconsistencies. Some studies have found that CR has no significant effect on stock returns (Nurrohmah & Syah, 2025), while other studies have stated that there is a negative influence (Prastyawan et al., 2022). In contrast, ROA and ROE were generally found to have a positive influence on stock returns, although some other studies reported different results. This difference indicates that there is a research gap that needs to be explored further, especially in the coal subsector which has different industrial characteristics and risks compared to other sectors.

Based on this background, this study aims to analyze the influence of current ratio, return on assets, and return on equity on stock returns in the coal subsector listed on the IDX for the 2020–2023 period. The results of the research are expected to make an empirical contribution to the development of literature related to the relationship between financial ratios and stock returns, as well as serve as a reference for investors, company management, and policymakers in strategic decision-making based on fundamental data.

RESEARCH METHODS

This study employs an associative quantitative research design to examine the relationship and influence among variables using numerical data and statistical procedures (Sugiyono, 2021). The approach is used to assess whether independent variables are associated with and can explain variation in the dependent variable in a measurable and systematic manner through hypothesis testing grounded in established theories.

The type of data used is secondary data obtained from the company's annual financial statements, stock price data, and other relevant supporting information. The data were collected

using the documentation method through the official publications of the Indonesia Stock Exchange (IDX) and other official sources. The research focuses on coal subsector issuers listed on the IDX within the 2020–2023 observation period, in line with the study scope described in the manuscript.

Variables, Operational Definitions, and Measurements

This study examines stock return as the dependent variable and uses three independent variables: Current Ratio (CR), Return on Assets (ROA), and Return on Equity (ROE).

1. Stock Return (Dependent Variable)

Stock return refers to the profit received by investors from investing in stocks. It can be categorized into realized return (actual return calculated from historical data) and expected return (return expected in the future). Historical return information is commonly used to evaluate performance and to estimate future returns and risks. In the coal subsector context, stock returns can also be affected by external dynamics such as global coal price fluctuations and export–import policies, in addition to firm financial performance. The components of stock return include current income and capital gain/loss (Fabozzi & Drake, 2009).

Operationally, stock return is calculated as:

$$Stock\ Return = \frac{Pt - Pt - 1}{Pt - 1}\ x\ 100\%$$

Where:

- = the stock price in the current period (typically the closing price at time t)
- = the stock price in the previous period (closing price at time $t - 1$)
- = the price change (capital gain/loss)
- × 100% = converts the return into a percentage

2. Current Ratio (CR)

The Current Ratio is a liquidity ratio that measures a firm's ability to meet short-term obligations using its current assets. A very low CR may indicate liquidity risk, while an excessively high CR may signal inefficient or unproductive use of funds (Kasmir, 2019). In coal industry operations, adequate liquidity can reflect operational stability, such as the ability to pay suppliers, employees, and mining operational costs.

Operationally, CR is measured as:

$$Current\ Ratio = \frac{Current\ Assets}{Current\ Liabilities}$$

3. Return on Assets (ROA)

ROA is a profitability ratio that evaluates a company's ability to generate profit from its total assets. A higher ROA implies more effective and optimal asset utilization and may increase investor interest (Hasanatun et al., 2025). In the coal sector, ROA can also reflect how efficiently mining assets, heavy equipment, and production facilities are managed to generate profits.

Operationally, ROA is measured as:

$$Return\ on\ Assets = \frac{Net\ Income}{Total\ Assets}\ x\ 100\%$$

4. Current Ratio (CR)

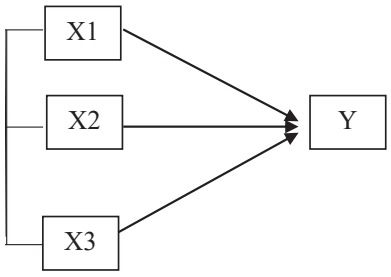
ROE measures a firm's ability to generate net profit from shareholders invested capital. A high ROE indicates efficient use of shareholders' equity to generate profits, which may increase stock attractiveness in the market (Lusiana, 2020).

Operationally, ROE is measured as:

$$Return\ on\ Equity = \frac{\text{Net Income}}{\text{Equity}}\ \text{x}\ 100\%$$

Research Framework (Figure)

The conceptual structure of this study is presented in Picture 1 (Frame of Mind), illustrating stock return (Y) as the dependent variable explained by CR (X1), ROA (X2), and ROE (X3).



Picture 1. Frame of Mind

Empirical Model and Estimation Method

To assess the influence of the independent variables on stock return, the study applies multiple linear regression. This method is appropriate for estimating the partial relationship of multiple predictors with one dependent variable within the classical linear model framework.

The general regression model is specified as:

$$Y = \alpha + \beta_1 CR + \beta_2 ROA + \beta_3 ROE + \varepsilon$$

Where:

- = stock return (dependent variable)
- = constant/intercept (the expected stock return when all independent variables are equal to zero)
- = regression coefficients (the estimated change in for a one-unit increase in each independent variable, holding the other variables constant)
- = Current Ratio (independent variable 1)
- = Return on Assets (independent variable 2)

- ❖ = Return on Equity (independent variable 3)
- ❖ = error term/disturbance (captures other factors not included in the model that may affect stock return)

Data Screening and Assumption Diagnostics

Before interpreting the regression estimates, the study conducts classical assumption tests to support model validity, including normality, multicollinearity, heteroscedasticity, and autocorrelation tests.

Software and Reporting

Statistical processing is carried out using software such as EViews to compute the regression model and diagnostic tests, and to support accurate reporting of coefficients, significance values, and goodness-of-fit measures.

RESULTS AND DISCUSSION

The results are presented and interpreted in this section, followed by a discussion that links the findings to previous studies and theoretical perspectives.

Classical Assumption Test Results

The following classical assumption tests were carried out to assess the suitability of the data and ensure the regression model meets key underlying assumptions.

1. Normality Test

The normality test was performed to examine whether the residuals are normally distributed, which is essential for ensuring the validity of subsequent statistical inferences.

Table 2. Normality Test

Remarks	Value
Sample Count (N)	14
Mean Residual	0,000
Standard Deviation	18.576
K–S Grades	0.169

Source: Data processed by the author (2025)

Based on the table above, the results of the normality test with the Kolmogorov-Smirnov Test (K-S) after removing outliers or extreme data have an asymp value. Sig (2-tailed) of 0.200 is greater than 0.05 or (5%), so that it can be interpreted that the data in the residual variable regression model value research has a normal distribution and can proceed to the next stage of testing.

2. Multicollinearity Test

The multicollinearity test was conducted to determine whether independent variables are highly correlated with each other, which could distort the regression estimates. Multicollinearity

was assessed using the Variance Inflation Factor (VIF) and tolerance values, as presented in the table below.

Table 3. The Multicollinearity Test

Variabel	Tolerance	VIF	Remarks
Current Ratio (CR)	0.371	2.692	No multicollinearity was detected
Return on Assets (ROA)	0.265	3.775	No multicollinearity was detected
Return on Equity (ROE)	0.523	1.912	No multicollinearity was detected

Source: Data processed by the author (2025)

The table above indicates that the data in this study do not suffer from multicollinearity. This conclusion is supported by the fact that all independent variables have VIF values below 10 and tolerance values above 0.10. Specifically, the Current Ratio (CR) has a VIF of 2.692 and a tolerance of 0.371, while Return on Assets (ROA) shows a VIF of 3.775 and a tolerance of 0.265. In addition, Return on Equity (ROE) has a VIF of 1.912 and a tolerance of 0.523. Therefore, none of the variables exhibit multicollinearity, and the regression model can be considered free from serious correlation among independent variables.

3. Autocorrelation Test

The autocorrelation test was conducted to determine whether the residuals are correlated across observations, which can violate the regression assumption of independent errors. The test results are presented in the table below.

Table 4. Summarizes

Remarks	Value
R	0.648
R Square	0.420
Adjusted R Square	0.245
Std. Error of Estimate	21.180
Durbin–Watson	2.801

Source: Data processed by the author (2025)

Table 4 summarizes the overall fit of the multiple regression model. The correlation coefficient (R = 0.648) indicates a moderate relationship between observed stock returns and the returns predicted by the model. The coefficient of determination (R^2 = 0.420) implies that CR, ROA, and ROE jointly explain 42.0% of the variation in stock returns. After adjusting for the number of predictors and sample size, the explanatory power decreases to Adjusted R^2 = 0.245, meaning the model explains about 24.5% of the variation in stock returns, while the remaining variation is attributable to other factors not included in the model. The standard error of the estimate (21.180) reflects the average prediction error of the regression model (in the same unit as stock return).

Table 5. Durbin Watson (DW) Critical Values (α = 5%)

N	k=1		k=2		K=3	
	Dl	Du	Dl	Du	Dl	Du
6	0.6102	1.4002				
7	0.6996	1.3564	0.4672	1.8964		
8	0.7629	1.3324	0.5591	1.7771	0.3674	2.2866
9	0.8243	1.3199	0.6291	1.6993	0.4548	2.1282
10	0.8791	1.3197	0.6972	1.6413	0.5253	2.0163
11	0.9273	1.3241	0.7580	1.6044	0.5948	1.9280
12	0.9708	1.3314	0.8122	1.5794	0.6577	1.8640
13	1.0097	1.3404	0.8612	1.5621	0.7147	1.8159
14	1.0450	1.3503	0.9054	1.5507	0.7667	1.7788
15	1.0770	1.3605	0.9455	1.5432	0.8140	1.7501

Based on the Model Summary output, the Durbin–Watson statistic is d = 2.801. At the 5% significance level with n = 14 observations and k = 3 predictors, the Durbin–Watson critical values are dL = 0.7667 and dU = 1.7788 (Table 5). Therefore, 4 − dU = 2.2212 and 4 − dL = 3.2333. Since d > dU, there is no evidence of positive autocorrelation. However, because 4 − dU < d < 4 − dL, the Durbin–Watson test result is inconclusive regarding negative autocorrelation, meaning negative autocorrelation cannot be confirmed or ruled out using DW alone.

4. Heteroscedasticity Test

The heteroscedasticity test was conducted to examine whether the variance of the regression residuals is constant across levels of the predicted values. This study used a scatterplot of standardized residuals against standardized predicted values, as shown in the figure below.

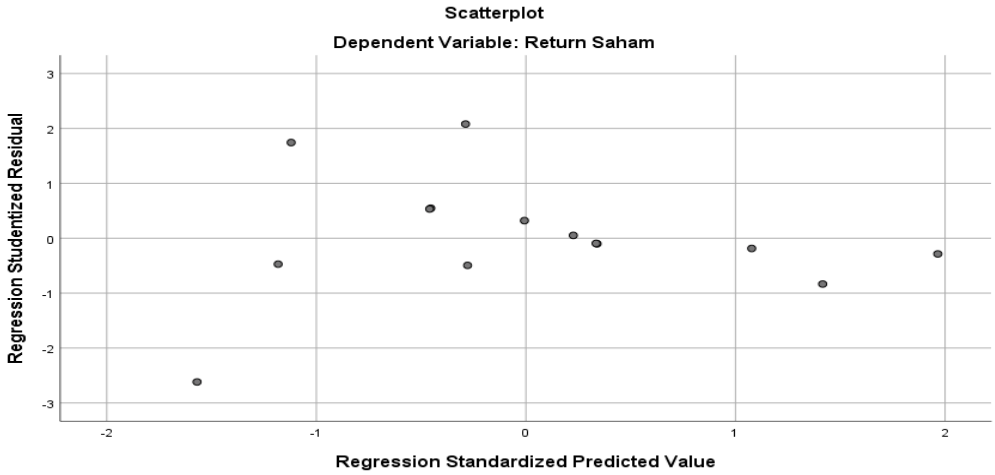


Figure 2. Heteroscedasticity Scatterplot

Based on the scatterplot above, the residuals are randomly dispersed around the zero line and are distributed both above and below 0. In addition, the points do not form a clear pattern (e.g., a

funnel or wave shape). Therefore, it can be concluded that the regression model does not indicate heteroscedasticity, meaning the assumption of homoscedasticity is satisfied.

Multiple Regression Analysis Test

This section presents the results of the multiple linear regression analysis to examine the effect of the independent variables on stock returns. The regression coefficients, t-statistics, and significance values are summarized in the table below.

Table 6. Multiple Linear Regression Coefficients

Variabel	Coefficient (B)	Std. Error	t-count	Sig	Remarks
Konstanta	113,448	18,867	6,013	0,000	Signifikan
Current Ratio (CR)	-0,200	0,172	-1,165	0,271	Not significant
Return on Assets (ROA)	-1,011	1,635	-0,619	0,550	Not significant
Return on Equity (ROE)	1,271	0,561	2,266	0,047	Signifikan

Source: Data processed by the author (2025)

Based on Table 6, the estimated multiple regression model is:

$$Y=113.448-0.200CR-1.011ROA+1.271ROE+\varepsilon$$

From this equation, it can be explained that:

a. The constant (113.448) indicates the expected value of stock return when CR, ROA, and ROE are equal to zero, holding other factors constant.
b. The coefficient of CR is -0.200 (p = 0.271), meaning that a one-unit increase in CR is associated with a 0.200 decrease in stock return, ceteris paribus; however, this effect is not statistically significant.
c. The coefficient of ROA is -1.011 (p = 0.550), implying that a one-unit increase in ROA is associated with a 1.011 decrease in stock return, ceteris paribus; this effect is also not statistically significant.
d. The coefficient of ROE is 1.271 (p = 0.047), indicating that a one-unit increase in ROE is associated with a 1.271 increase in stock return, ceteris paribus; this effect is statistically significant at the 5% level.

Model Feasibility Test

After estimating the multiple regression model, a model feasibility test was conducted to examine whether the independent variables jointly have a significant effect on stock returns. This feasibility was assessed using the F-test (ANOVA), as presented in the following section.

1. Coefficient of Determination (R2)

The coefficient of determination (R^2) was used to measure how well the independent variables explain the variation in the dependent variable. In this study, the explanatory power of the model is primarily interpreted using the Adjusted R^2 value, as shown in the table below.

Table 7. Coefficient of Determination (R^2)

Remarks	Value
R	0,648
R Square	0,420
Adjusted R Square	0,245
Std. Error of Estimate	21,180

Source: Data processed by the author (2025)

Based on the table above, the Adjusted R Square value is 0.245. This indicates that Current Ratio (CR), Return on Assets (ROA), and Return on Equity (ROE) jointly explain 24.5% of the variation in stock returns. The remaining 75.5% is influenced by other factors not included in this study.

2. Model Feasibility Test (F-test)

The F-test was conducted to evaluate the overall feasibility of the regression model, namely whether the independent variables jointly have a significant effect on stock returns. The results of the F-test (ANOVA) are presented in the table below.

Table 8. ANOVA (F-test) Results

Remarks	Value
F-count	2,409
Significance	0,128

Source: Data processed by the author (2025)

Based on the table above, the significance value is 0.128, which is greater than 0.05. Therefore, it can be concluded that, simultaneously, Current Ratio (CR), Return on Assets (ROA), and Return on Equity (ROE) do not have a significant effect on stock returns.

3. Hypothesis Test (t-Test)

Table 9. Partial t-test Results (Hypothesis Testing)

Variabel	t-count	Sig	Verdict
Current Ratio (CR)	-1,165	0,271	H_1 rejected
Return on Assets (ROA)	-0,619	0,550	H_2 rejected
Return on Equity (ROE)	2,266	0,047	H_3 Accepted

Source: Data processed by the author (2025)

From the partial test results in table 9. above, it can be seen that:

a. H_1: Current Ratio (CR) has a significant effect on stock returns.
   The results show that CR does not have a significant effect on stock returns because the significance value is 0.271, which is greater than 0.05. Therefore, H_1 is rejected, meaning that variations in CR do not significantly influence stock returns.

b. H_2: Return on Assets (ROA) has a significant effect on stock returns.
   ROA also does not have a significant effect on stock returns, as indicated by the significance

value of 0.550 (> 0.05). Thus, H_2 is rejected, implying that changes in ROA do not significantly affect stock returns.

c. H_3: Return on Equity (ROE) has a significant effect on stock returns.

In contrast, ROE has a significant effect on stock returns because the significance value is 0.047, which is less than 0.05. Therefore, H_3 is accepted, indicating that ROE significantly influences stock returns.

Discussion

In recent years, the energy landscape has shifted into a "new regime": post-pandemic recovery, the global energy crisis, surging electricity demand, and the push for the energy transition have unfolded simultaneously. Under these conditions, coal has remained the world's primary source of electricity, while coal markets have experienced substantial volatility—although more recently they have tended to be more stable than during the peak uncertainty of the energy crisis. This picture is consistent with the IEA's reports on the stabilization of coal markets after a period of shocks and the continued strength of global electricity demand, as well as the World Bank's notes on price dynamics shaped by supply, demand, and market expectations (Agnolucci & Temaj, 2024; International Energy Agency, 2024).

In the energy finance literature, a shock-regime situation like this typically means that stock returns especially in commodity sectors that respond more quickly to external information (commodity prices, policy risk, sentiment) than to annual accounting indicators. A study by Liu et al. (2024) shows that coal price shocks have a negative impact on stock market returns and that the effect is time-varying; importantly, investor sentiment emerges as a transmission channel explaining why commodity turbulence can rapidly hit equity markets.

This is where your research findings become relevant: you examine whether a firm's internal ratios (CR, ROA, ROE) can explain stock returns in the coal subsector over the 2020–2023 period. The results indicate that, jointly, CR–ROA–ROE are not strong enough to explain returns (the model is not significant). However, on a partial basis, ROE emerges as the only variable with a positive and significant effect. Meanwhile, CR and ROA are not significant, and the model's explanatory power is relatively limited (Adjusted R^2 of about 0.245). This pattern aligns with the global context: when markets are driven by external shocks, the signal most directly tied to shareholders (ROE) tends to be picked up by investors more quickly than liquidity signals (CR) or asset-efficiency signals (ROA).

The finding that ROE is significant can be interpreted as evidence that the market—even in commodity sectors—still places weight on shareholder-oriented profitability. In the asset pricing literature, profitability measures closely related to ROE are often used to explain variations in returns because they reflect a firm's ability to generate earnings on owners' equity. One example consistent with this view is study Lim et al. (2024) that emphasizes that profitability dynamics (measured via ROE/profitability) contain informational content for predicting future returns, although the magnitude of the effect may vary depending on firm characteristics and scale.

ROE also makes sense as a signal that investors can more easily understand in the coal business. When the price cycle is favorable, the market tends to reward companies that can translate commodity momentum into profits that genuinely strengthen equity—whether through dividend capacity, a stronger balance-sheet capital structure, or disciplined capital spending. As a result, ROE can serve as a concise summary of how effectively a company converts cyclical opportunities into

value for shareholders. Amid the energy volatility of 2020–2023, such a summary is often viewed by investors as more reliable than more operational ratios, which can invite ambiguous interpretation.

Conversely, the insignificance of the current ratio (CR) can be explained by the dual meaning of liquidity in commodity companies. A high CR may reflect a safe position, but it can also indicate a temporary build-up of cash from short-lived windfall profits, or an expansion of working capital that is not accompanied by improved long-term prospects. In market conditions shaped by commodity price shocks, investors tend to view the ability to generate sustainable cash flows and resilience to shifts in policy and demand as more important than the level of current assets at a single reporting date. As a result, the effect of CR on returns becomes inconsistent and ultimately is not detected as statistically significant.

The insignificance of ROA is also reasonable in an asset-intensive industry. In mining, the large asset base tends to keep ROA subdued even when profits rise, while changes in profits are often driven more by commodity price movements than by improvements in asset-use efficiency. When the market is processing external information such as coal prices, logistics costs, regulation, and the outlook for electricity demand, annual-report-based ROA becomes a relatively slow and noisy indicator for capturing stock price reactions, which often occur well before annual performance is fully reflected in financial statements.

If compared with the latest global research, the direction of your findings aligns with two major currents: climate risk and the energy transition, as well as ESG valuation mechanisms. Gong et al. (2023) shows evidence of a climate risk premium in the stocks of fossil-fuel-based companies, meaning that climate risk, as market-relevant information, can help shape returns. The size of this premium is also not uniform, as it is influenced by cross-country differences and income levels. From an ESG perspective, study by Galema & Gerritsen (2025) shows that changes in ESG ratings—particularly the environmental component—can be reflected in stock returns over a horizon of several months, and rating downgrades tend to be followed by negative abnormal returns. This is important because it helps explain why coal-sector returns are often more sensitive to external information and long-term risk perceptions than to traditional accounting ratios alone.

For the Indonesian context, relying on CR and ROA alone is insufficient to explain coal stock returns, because their effects are often overshadowed by external factors such as coal prices, electricity demand, policy risk, and shifts in market sentiment. Your findings suggest that ROE is more readily incorporated by the market, so a shareholder-oriented analysis that tests ROE alongside external variables—such as coal prices, exchange rates, interest rates, and sentiment indicators—has the potential to improve the model's explanatory power. The literature on commodity shocks and sentiment also supports this approach, emphasizing strong external transmission channels to stock returns (Liu et al., 2024; Galema & Gerritsen, 2025a).

From an academic contribution perspective, the value of this study goes beyond testing financial ratios; it reinforces that during the shock-heavy 2020–2023 energy period, the most consistent fundamental signal associated with returns comes from equity profitability as captured by ROE. Meanwhile, liquidity and asset-efficiency indicators are not automatically relevant. These findings can serve as a foundation for developing richer models that combine a shareholder-value-based fundamental perspective, an energy finance framework emphasizing commodity price shocks and the role of sentiment, and climate, also ESG finance approaches highlighting climate risk and ESG valuation dynamics (Gong et al., 2023; Galema & Gerritsen, 2025b).

To strengthen the academic contribution of future research, it can help to offer recommendations that directly address the gaps implied by the findings. First, use firm-year panel data and incorporate

external variables such as coal prices or an energy index, exchange rates, and interest rates so that the energy-regime context is captured more fully. Second, test for information delays by including lagged terms, since annual accounting ratios may trail market reactions. Third, decompose ROE using the DuPont approach or control for leverage to determine whether the ROE priced by the market is driven more by profit margins and asset turnover, or primarily by capital structure. Fourth, add sentiment proxies as well as climate-risk and ESG proxies, given international evidence suggesting that these factors can influence returns (Yang et al., 2023; Liu et al., 2024; Galema & Gerritsen, 2025b)

CONCLUSION

Based on the analysis of the coal subsector over the 2020–2023 period, this study finds that the financial ratios examined—Current Ratio (CR), Return on Assets (ROA), and Return on Equity (ROE)—are jointly not strong enough to explain movements in stock returns. However, in the partial tests, only ROE is shown to have a positive and significant effect on stock returns, while CR and ROA do not exhibit a meaningful influence. These findings indicate that in the coal industry, which is heavily shaped by commodity price dynamics and market sentiment, investors tend to respond more to the indicator most directly tied to shareholder interests—namely, the firm's ability to generate profits on equity.

The model's limited explanatory power further supports the view that coal stock returns are not determined solely by a company's internal fundamentals, but are also driven by dominant external factors such as energy-market volatility, policy shifts, and investor expectations regarding sector risks and prospects. Therefore, the study's main contribution lies in providing evidence that, within the coal sector during a shock-intensive period, equity-based profitability through ROE is more relevant as a market signal than short-term liquidity (CR) or asset efficiency (ROA).

Practically, these results suggest that investors and analysts should treat ROE as a key indicator when evaluating coal issuers, while combining it with external variables that capture energy-market conditions and policy risk. From an academic development perspective, future research is encouraged to adopt a panel-data approach and add control variables such as coal prices, exchange rates, interest rates, leverage, and proxies for sentiment and ESG risk, so that the model can better capture the mechanisms that truly drive stock returns in commodity sectors.

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