



DOI: <https://doi.org/10.38035/snefr.v2i2>
<https://creativecommons.org/licenses/by/4.0/>

The Effect of Financial Performance on Stock Prices of Coal Subsector Companies Listed on the Indonesia Stock Exchange for the 2021–2024 Period

Muhammad Haikal¹, Ati Harianti²

¹Universitas Trilogi, Jakarta, Indonesia, mhaikal@trilogi.ac.id.

²Universitas Trilogi, Jakarta, Indonesia, a_harianti@trilogi.ac.id.

Corresponding Author: mhaikal@trilogi.ac.id.¹

Abstract: This study examines the effect of financial performance on stock prices of coal subsector companies listed on the Indonesia Stock Exchange during 2021–2024. Financial performance is measured using Current Ratio, Return on Assets, Debt to Equity Ratio, Earnings Per Share, and Total Asset Turnover. The study uses a quantitative approach with secondary data from annual financial reports and stock price data. The sample consists of 27 coal subsector companies selected through purposive sampling, producing 108 firm-year observations. Panel data regression is estimated using the Fixed Effect Model after the Chow and Hausman tests. The results show that Current Ratio, Return on Assets, Debt to Equity Ratio, and Earnings Per Share do not have a statistically significant partial effect on stock prices. Total Asset Turnover has a positive and statistically significant effect on stock prices. Simultaneously, the five financial ratios significantly affect stock prices. The adjusted coefficient of determination is 0.947883, indicating that the model explains 94.79 percent of the variation in stock prices. The findings indicate that asset-use efficiency is the most consistent financial indicator associated with stock price movements in the observed coal subsector.

Keyword: Current Ratio, Return on Assets, Debt to Equity Ratio, Earnings Per Share, Total Asset Turnover, Stock Price.

Indonesian Abstract: Penelitian ini menguji pengaruh kinerja keuangan terhadap harga saham pada perusahaan subsektor batu bara yang terdaftar di Bursa Efek Indonesia selama periode 2021–2024. Kinerja keuangan diukur menggunakan Current Ratio, Return on Assets, Debt to Equity Ratio, Earnings Per Share, dan Total Asset Turnover. Penelitian ini menggunakan pendekatan kuantitatif dengan data sekunder yang diperoleh dari laporan keuangan tahunan dan data harga saham. Sampel terdiri dari 27 perusahaan subsektor batu bara yang dipilih melalui metode purposive sampling, menghasilkan 108 observasi tahun-perusahaan (firm-year). Regresi data panel diestimasi menggunakan Fixed Effect Model setelah melalui uji Chow dan uji Hausman. Hasil penelitian menunjukkan bahwa Current Ratio, Return on Assets, Debt to Equity Ratio, dan Earnings Per Share tidak berpengaruh signifikan secara parsial terhadap harga saham. Total Asset Turnover berpengaruh positif dan signifikan secara statistik terhadap harga saham. Secara simultan, kelima rasio keuangan tersebut berpengaruh signifikan terhadap harga

saham. Koefisien determinasi yang disesuaikan (*adjusted R-squared*) sebesar 0,947883, yang menunjukkan bahwa model ini mampu menjelaskan 94,79 persen variasi harga saham. Temuan ini mengindikasikan bahwa efisiensi penggunaan aset merupakan indikator keuangan yang paling konsisten dalam mengestimasi pergerakan harga saham pada subsektor batu bara yang diamati.

Kata Kunci: *Current Ratio, Return on Assets, Debt to Equity Ratio, Earnings Per Share, Total Asset Turnover, Harga Saham.*

INTRODUCTION

The capital market is an important source of funding for companies and provides investors with opportunities to allocate capital to potentially profitable instruments. Stock prices are widely observed because they reflect the interaction between supply and demand and market perceptions of a company's condition and prospects. In coal subsector companies, stock price dynamics are also related to changes in industry conditions, commodity prices, energy policies, and investor expectations. This study focuses on financial performance as an internal factor that can provide information to investors when evaluating companies.

The research data show substantial fluctuations in coal subsector stock prices during the observation period. In the source thesis, the coal subsector stock price index was recorded at Rp1,949 in 2021, increased to Rp3,565 in 2022, declined to Rp2,333 in 2023, and increased again to Rp3,079 in 2024. This pattern shows that stock price increases did not occur linearly. This condition strengthens the need to examine whether corporate financial indicators have a consistent relationship with stock prices.

Financial performance in this study is represented by five ratios: Current Ratio (CR), Return on Assets (ROA), Debt to Equity Ratio (DER), Earnings Per Share (EPS), and Total Asset Turnover (TATO). CR measures a company's ability to meet short-term obligations. ROA indicates the ability of assets to generate profit. DER describes the financing structure through the comparison of liabilities and equity. EPS represents earnings available for each share. TATO measures the efficiency of using total assets to generate sales (Gitman & Zutter, 2015; Kasmir, 2019).

Signalling Theory explains that information disclosed by companies can serve as a signal for investors in reducing information asymmetry. Spence (1973) describes signalling as a mechanism for communicating information between parties with different levels of information. Ross (1977) developed this idea in the financial context by showing that financial decisions can signal a company's prospects. In this study, financial ratios are viewed as information that investors can use to assess corporate conditions and form expectations about stock prices.

Previous empirical findings have not been consistent. Sangadah and Erdkhadifa (2023) found that CR had a positive effect on stock prices, whereas Gusmiarni and Putri (2024) found no effect. Habibah et al. (2022) reported an effect of ROA on coal stock prices, while Rivandi and Pratiwi (2021) found no effect. Nastiti et al. (2023) found a negative effect of DER, whereas Sari et al. (2022) found no effect. For EPS, Sari et al. (2022) found a positive effect, while Nurtrifani and Kusumawardani (2023) reported an insignificant result. For TATO, Sumantri and Sukartaatmadja (2022) found a positive and significant effect.

Studies specifically focusing on the coal subsector also report mixed findings. Yolanda et al. (2023) found that TATO had a positive and significant effect on stock prices, while ROA and DER were insignificant. Other studies of coal companies show that CR, DER, and ROA can produce different results depending on the period and sample. These differences provide an opportunity for further testing using a broader sample and a more recent observation period.

Based on these phenomena and differences in empirical findings, this study aims to analyze the effects of CR, ROA, DER, EPS, and TATO on the stock prices of coal subsector companies listed on the Indonesia Stock Exchange during 2021–2024, both partially and simultaneously. This study is expected to provide empirical evidence regarding the financial performance

indicators most relevant to stock price movements in the coal subsector.

METHOD

The study uses a quantitative approach with secondary data. The population consists of coal subsector companies listed on the Indonesia Stock Exchange during 2021–2024. The sample was selected using purposive sampling based on several criteria: companies had to remain listed throughout the observation period, not experience stock trading suspension during the research period, and publish complete annual financial reports.

Based on these criteria, 27 companies were selected as the sample, with four years of observation producing 108 firm-year observations. Data on CR, ROA, DER, EPS, TATO, and stock prices were obtained from annual financial reports and Indonesia Stock Exchange data. Stock prices were transformed into natural logarithms to reduce substantial differences in scale across company.

CR is calculated as current assets divided by current liabilities. ROA is calculated as net income divided by total assets. DER is calculated as total liabilities divided by total equity. EPS represents earnings available for each share. TATO is calculated as sales divided by total assets. The dependent variable is the closing stock price, which is then transformed into a natural logarithm.

The analysis began with descriptive statistics. Common Effect Model, Fixed Effect Model, and Random Effect Model were then estimated. Model selection was conducted using the Chow test to compare CEM and FEM and the Hausman test to compare FEM and REM. The test results selected FEM as the final model. The assumption tests covered normality, multicollinearity, heteroskedasticity, and autocorrelation. Hypothesis testing was conducted using the coefficient of determination, F-test, and t-test at a 5% significance level. The final model specification is written as follows.

$$\text{LN}(\text{Stock Price}) = 6.123448 + 0.022733\text{CR} + 0.204821\text{ROA} + 0.079593\text{DER} + 0.00000384\text{EPS} + 0.604355\text{TATO} + e$$

Table 1. Operational Definition of Variables

Variable	Measurement	Scale
CR	Current Assets / Current Liabilities	Ratio
ROA	Net Income / Total Assets	Ratio
DER	Total Liabilities / Total Equity	Ratio
EPS	Earnings attributable to each ordinary share	Rupiah/share
TATO	Sales / Total Assets	Ratio
Stock Price	Closing stock price, transformed into natural logarithm	Ratio

Source: Gitman and Zutter (2015), Kasmir (2019), and processed research data

RESULTS AND DISCUSSION

The descriptive results cover 108 observations from 27 companies over four years. The data show substantial variation across companies, particularly in stock prices, EPS, CR, and DER. This variation supports the use of panel regression because the sample contains both cross-sectional and time-series dimensions.

Table 2. Descriptive Statistics

Variable	Mean	Minimum	Maximum	Std. Dev.
LN Stock Price	6.903814	3.912000	11.52340	1.792422
CR	2.742688	0.007500	29.77450	3.713591
ROA	0.119517	-3.540000	1.687100	0.419213

DER	1.360119	0.021000	10.79070	2.192134
EPS	743.98	-114.1392	16,832.17	2,239.57
TATO	0.963710	0.039600	3.182800	0.742716

Source: Appendix 1 and processed research data.

The average CR of 2.742688 indicates that, on average, current assets were about 2.74 times current liabilities. However, the wide standard deviation indicates meaningful differences in liquidity among sampled companies. ROA averaged 0.119517, while its minimum value was negative, showing that several observations recorded losses relative to total assets. DER averaged 1.360119, indicating that liabilities were, on average, higher than equity. EPS had a very wide dispersion, with negative and very high positive observations. TATO averaged 0.963710, suggesting that each rupiah of assets generated less than one rupiah of sales on average.

The model selection results support the use of the Fixed Effect Model. The Chow test produced a probability value of 0.0000, rejecting the Common Effect Model. The Hausman test produced a probability value of 0.0006, rejecting the Random Effect Model. Therefore, FEM was selected as the final estimation model. The test results also indicate that differences among firms are important in explaining stock price variation.

Table 3. Panel Data Model Selection

Test	Statistic	Probability	Decision
Chow: Cross-section F	44.885196	0.0000	Fixed Effect Model
Chow: Cross-section Chi-square	301.812684	0.0000	Fixed Effect Model
Hausman: Cross-section random	21.684709	0.0006	Fixed Effect Model

Source: Processed research data

The diagnostic tests indicate that the final model satisfies the required conditions used in the study. The Jarque-Bera probability was 0.195126, which is above 0.05, so the residuals were considered normally distributed. The pairwise correlations among independent variables were all below 0.80, indicating no substantial multicollinearity. The Glejser probabilities for CR, ROA, DER, EPS, and TATO were 0.7480, 0.5017, 0.4852, 0.2509, and 0.6064, respectively, all above 0.05. The Durbin-Watson statistic was 1.991858 and fell between the reported dU and 4-dU bounds, indicating no detected autocorrelation.

Table 4. Fixed Effect Model Estimation

Variable	Coefficient	t-Statistic	Probability	Decision
CR	0.022733	1.276547	0.2056	Not significant
ROA	0.204821	1.567539	0.1211	Not significant
DER	0.079593	1.897122	0.0616	Not significant
EPS	0.00000384	0.129020	0.8977	Not significant
TATO	0.604355	3.298758	0.0015	Positive and significant
Constant	6.123448	27.321280	0.0000	Significant

Source: Fixed Effect Model, processed research data.

The FEM produces an R-squared of 0.962983 and an adjusted R-squared of 0.947883. Thus, the five financial ratios jointly explain 94.79 percent of the variation in stock prices after adjustment for the number of explanatory variables. The remaining 5.21 percent is associated with factors outside the model. The F-statistic is 63.77697 with a probability of 0.000000, indicating that CR, ROA, DER, EPS, and TATO jointly have a significant effect on stock prices.

Current Ratio and Stock Price

CR has a positive coefficient of 0.022733, but its probability of 0.2056 exceeds 0.05.

Therefore, CR does not have a statistically significant effect on stock prices. The positive coefficient only describes the estimated direction of the relationship in the sample. Because the relationship is not statistically significant, it should not be interpreted as evidence that increases in CR cause stock prices to rise. This result suggests that short-term liquidity is not a dominant signal used by investors when valuing coal subsector stocks during the observation period. The finding is consistent with Gusmiarni and Putri (2024), who reported that CR did not significantly affect stock prices. It also differs from Sangadah and Erdkhadifa (2023).

who reported a significant positive relationship. The difference may reflect the characteristics of the sector and period. Coal companies operate with substantial fixed assets and are strongly exposed to commodity cycles, so investors may focus more on operational efficiency and future earnings prospects than on short-term liquidity alone.

Return on Assets and Stock Price

ROA has a positive coefficient of 0.204821, with a probability of 0.1211. Because the probability is greater than 0.05, ROA does not significantly affect stock prices. The positive coefficient indicates the estimated direction, but it does not provide sufficient statistical evidence of an effect. In other words, an increase in the ability to generate profit from assets was not consistently followed by an increase in stock prices across the sampled companies.

The result is consistent with Rivandi and Pratiwi (2021), who found that ROA did not significantly affect stock prices. It differs from Habibah et al. (2022), who found a significant effect in the coal stock context. One possible explanation is that profitability in coal companies can change quickly with commodity prices. Investors may therefore evaluate expected future profitability, commodity price prospects, and market conditions rather than relying only on the current-period ROA

Debt to Equity Ratio and Stock Price

DER has a positive coefficient of 0.079593 and a probability of 0.0616. Since the probability remains above 0.05, DER does not significantly affect stock prices at the 5 percent level. The coefficient is positive, but the statistical test does not support a significant relationship. Thus, the positive direction should not be treated as proof that higher leverage increases stock prices.

This finding is consistent with Sari et al. (2022), who found that DER did not significantly affect stock prices. It differs from Nastiti et al. (2023), who found a negative significant effect. For coal companies, debt can finance productive assets and operational expansion. Investors may therefore assess leverage together with the company's ability to generate cash flow and manage debt, rather than treating DER as an isolated indicator.

Earnings Per Share and Stock Price

EPS has a coefficient of 0.00000384 and a probability of 0.8977. The probability is far above 0.05, so EPS does not significantly affect stock prices. The extremely small coefficient also indicates that the estimated change in the transformed stock price associated with one unit of EPS is very limited in this model. The descriptive results show wide EPS dispersion and negative observations, which may reduce the consistency of the relationship across firms.

The result is consistent with Nurtrifani and Kusumawardani (2023), who found that EPS did not significantly affect stock prices. It differs from Sari et al. (2022), who found a positive effect. In the coal subsector, current EPS may not fully capture investor expectations because earnings can be highly sensitive to coal prices, production levels, export conditions, and other external developments. Investors may place greater weight on expected future earnings than on a single annual EPS figure.

Total Asset Turnover and Stock Price

TATO has a coefficient of 0.604355 with a probability of 0.0015. The probability is below

0.05, so TATO has a positive and statistically significant effect on stock prices. Holding other variables constant, an increase in TATO is associated with an increase in the natural logarithm of stock price. This result identifies asset-use efficiency as the strongest significant financial indicator among the five variables examined. The finding supports Sumantri and Sukartaatmadja (2022) and is also consistent with the coal subsector evidence reported by Yolanda et al. (2023). Coal companies require substantial investment in assets and operating infrastructure. When those assets are used more efficiently to operational capability. This can strengthen investor confidence and increase demand for the company's shares.

The significant TATO result also provides an important implication for Signalling Theory. Efficiency in asset utilization is observable through financial reporting and can communicate information about management effectiveness. Unlike liquidity or leverage, which may be interpreted differently depending on the financing structure, TATO directly reflects the ability to turn the asset base into sales. The result therefore suggests that operational efficiency may be a more consistent signal of firm quality in the observed coal subsector.

Simultaneous Effect of Financial Performance on Stock Price

The F-statistic of 63.77697 with a probability of 0.000000 confirms that CR, ROA, DER, EPS, and TATO jointly affect stock prices. This result means that the financial ratios should not be viewed only as isolated indicators. Together, they represent liquidity, profitability, leverage, earnings capacity, and asset efficiency. The adjusted R-squared of

94.79 percent further shows that the combined model has strong explanatory power for the observed sample.

The simultaneous result is important for investment analysis because stock price formation rarely depends on a single accounting ratio. Even though four variables are not significant individually, their combined information contributes to the model's ability to explain stock price variation. The result also reinforces the need to evaluate financial performance as a set of interconnected indicators while considering external factors such as commodity prices, macroeconomic conditions, and market sentiment.

CONCLUSION

This study concludes that financial performance indicators do not have uniform effects on stock prices in the coal subsector during 2021–2024. CR has a positive but statistically insignificant coefficient, so CR does not significantly affect stock prices. ROA also has a positive but insignificant coefficient and therefore does not significantly affect stock prices. DER has a positive coefficient but remains statistically insignificant at the 5 percent level. EPS has a positive but very small coefficient and does not significantly affect stock prices. In contrast, TATO has a positive and significant effect, indicating that efficient asset utilization is associated with higher stock prices. Simultaneously, CR, ROA, DER, EPS, and TATO significantly affect stock prices, with an adjusted R-squared of 94.79 percent.

The main implication is that investors should pay particular attention to asset-use efficiency when assessing coal subsector companies, while still considering liquidity, profitability, leverage, and earnings as part of a broader analysis. Companies can strengthen investor confidence by improving the productivity of their asset base and maintaining sound financial conditions. Future research can extend the observation period, include additional macroeconomic and market variables, and examine other energy subsectors to test whether the significant role of TATO remains stable.

REFERENCE

- Basuki, A. T., & Prawoto, N. (2016). *Regression Analysis in Economic and Business Research*. PT Rajagrafindo Persada.
- Delvy Kamila, D., Susilowati, D., & Moorcy, N. H. (2024). The Effect of Current Ratio, Debt to Equity, Return on Asset, and Total Asset Turnover on Stock Prices of Software and IT

- Services Subsector Companies. *COSTING: Journal of Economic, Business and Accounting*, 7, 10806–10816.
- Gitman, L. J., & Zutter, C. J. (2015). *Principles of Managerial Finance*. Pearson Education
- Gusmiarni, & Putri, D. Y. S. (2024). The Effect of Current Ratio (CR), Net Profit Margin (NPM), and Return on Equity (ROE) on Stock Prices of Food and Beverage Companies on the Indonesia Stock Exchange in 2018–2022. *Jurnal Akademi Akuntansi Indonesia Padang*, 4(1), 1–17.
- Habibah, U. K., Zuhroh, I., & Sangadah, D. (2022). Coal Stock Price Fluctuations: The Role of Firm-Specific and Macroeconomic Factors. *Jurnal Akademi Akuntansi*, 5(3), 349–363. <https://doi.org/10.22219/jaa.v5i3.21065>
- Janaina, N. N., & Yudiantoro, D. (2023). The Effect of EPS, ROE, and DER on Stock Prices of Property and Real Estate Companies Listed in JII70. *Al-Kharaj: Jurnal Ekonomi, Keuangan & Bisnis Syariah*, 5(2), 762–771. <https://doi.org/10.47467/alkharaj.v5i2.1314>
- Kasmir. (2019). *Analisis Keuangan Edisi Revisi*. Rajawali Pers.
- Kirana, M. S., Utami, W. P., Damayanti, N., & Ningtyas, N. A. (2025). The Effect of Earnings Per Share and Return on Equity on Stock Prices of Islamic Commercial Banks. *Journal of Artificial Intelligence and Digital Business (RIGGS)*, 4(2), 1180–1187.
- Nastiti, N. S., Widodo, S., & Budiyo, I. (2023). The effect of Quick Ratio (QR), Return on Asset (ROA), Debt to Equity Ratio (DER), and Book Value Per Share (BVS) on stock price of companies listed in Jakarta Islamic Index (JII) for the 2017–2021 periods. *Keunis*, 11(2), 146. <https://doi.org/10.32497/keunis.v11i2.4406>
- Nurtrifani, R., & Kusumawardani, M. R. (2023). The Effect of Earnings per Share and Return on Equity on Infobank15 Stock Prices. *Jurnal Cendekia Keuangan*, 2(2), 69. <https://doi.org/10.32503/jck.v2i2.3642>
- Nurwulandaria, A., & Wahid, R. S. (2023). The effect of debt-to-equity ratio, return on asset, current ratio, and total asset turnover on stock price: The intervening effect of intrinsic value in Indonesia's retail business. *Shirkah: Journal of Economics and Business*, 9(1), 1–16. <https://doi.org/10.22515/shirkah.v9i1.630>
- Rivandi, M., & Pratiwi, T. I. (2021). The Effect of EPS, ROA, and ROE on Stock Prices of Insurance Companies Listed on the Indonesia Stock Exchange for the 2015–2019 Period. *Jurnal Ekonomi Bisnis, Manajemen dan Akuntansi (JEBMA)*, 1(2), 108–116. <https://doi.org/10.47709/jebma.v1i2.978>
- Ross, S. A. (1977). The determination of financial structure: The incentive-signalling approach. *The Bell Journal of Economics*, 8(1), 23–40. <https://doi.org/10.2307/3003485>
- Sangadah, Z. M., & Erdkhadifa, R. (2023). The Effect of Earnings Per Share, Return on Equity, Debt to Equity Ratio, and Current Ratio on Stock Prices. *KOMITMEN: Jurnal Ilmiah Manajemen*, 4(1).
- Sari, D. T. (2021). The Effect of Profitability, Liquidity, and Solvency Ratios on Stock Prices of Coal Mining Companies Listed on the Indonesia Stock Exchange for the 2017–2019 Period. *Jurnal KIAFE: Jurnal Kajian Ilmiah Akuntansi*, 11(3).
- Sari, L., Esparesya, W., & Septiano, R. (2022). The Effect of Earnings Per Share, Debt to Equity Ratio, and Return on Equity on Stock Prices of LQ45 Companies Listed on the Indonesia Stock Exchange in 2016–2020. *Jurnal Ilmu Manajemen Terapan*, 3(5), 479–490.
- Sari, Y., & Edastami, M. S. (2024). The Effect of Financial Performance on Stock Prices with Earnings Per Share as an Intervening Variable. 9(5).
- Sitanggang, T. N., Manalu, C. H., & Sianturi, M. M. (2022). The Effect of ROA, CR, TATO, and DER on Stock Prices in the Mining Sector Listed on the Indonesia Stock Exchange for the 2016–2019 Period. *Owner: Riset & Jurnal Akuntansi*, 6, 530–540.
- Spence, M. (1973). Job market signaling. *The Quarterly Journal of Economics*, 87(3), 355–374. <https://doi.org/10.2307/1882010>
- Sumantri, G. M., & Sukartaatmadja, I. (2022). The Effect of ROA, CR, and TATO on Stock Prices of Pharmaceutical Companies Listed on the Indonesia Stock Exchange for the

- 2016–2020 Period. *Jurnal Ilmiah Manajemen Kesatuan*, 10(1), 179–188.
<https://doi.org/10.37641/jimkes.v10i1.1536>
- Utami, A. P. T., & Nurismalatri. (2024). The Effect of Net Profit Margin, Debt to Asset Ratio, and Current Ratio on Stock Prices of Coal Subsector Mining Companies for the 2018–2023 Period. *Journal of Research and Publication Innovation*.
- Veny, V., Angelene, D., & Junita, E. (2022). Analysis of Fundamental Factors Affecting Stock Prices of Retail Sector Companies Before and During the COVID-19 Pandemic. 5(2), 180–192.
- Yolanda, K., Ramadhan, R. R., & Sulistyandari. (2023). The Effect of Return on Assets (ROA), Debt to Equity Ratio (DER), and Total Asset Turnover (TATO) on Stock Prices of Coal Mining Subsector Companies Listed on the Indonesia Stock Exchange in 2018–2021. *Jurnal Ilmiah Mahasiswa Merdeka EMBA*, 2(1).