



FINANCIAL RATIOS AND ENERGY STOCK PERFORMANCE: A STUDY ON INDONESIA'S ENERGY SECTOR (2019-2023)

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Abstract

The volatility of the energy sector's price necessitates a thorough assessment of financial performance indicators to guide investment decisions. This study investigates the impact of Dividend Yield, Earnings Per Share (EPS), Price Earnings Ratio (PER), and Net Profit Margin (NPM) on stock prices of energy companies listed on the Indonesia Stock Exchange (IDX) for the 2019–2023 period. This research uses multiple linear regression analysis; the results indicate that all variables significantly influence stock prices simultaneously and partially. Dividend Yield reflects potential cash returns in dividend form, enhancing investor expectations. Earnings Per Share demonstrates the company's ability to generate profits, while Net Profit Margin highlights operational efficiency, strengthening market confidence. The price earnings ratio serves as an indicator of the market's perception of future growth prospects. The F-test confirms that these variables collectively shape stock price dynamics. These findings align with previous studies, emphasizing the crucial role of fundamental financial metrics in stock valuation and investment analysis.

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INTRODUCTION

The Indonesian capital market has grown significantly over the past decade, with an exponential increase in investor participation. In general, the performance of a company will affect the company's share price (Giri & Purbawangsa, 2022). The better the performance of a company, the higher the operating profit that will be obtained and shareholders also enjoy the benefits of the company's income, so that many investors want to own the company's shares and the share price will increase (Surmadewi & Saputra, 2019). In carrying out operational activities it is important to maintain company liquidity. Data from the Central Securities Depository of Indonesia (KSEI) revealed that the number of capital market investors rose from approximately 2.48 million in 2019 to over 12 million by 2023, reflecting a growth of more than 300 percent in just four years (KSEI, 2023; Suratman et al., 2023). This development has been fueled by advancements in digital technology, the proliferation of online trading platforms, and financial literacy programs organized by the Financial Services Authority (OJK) and the Indonesia Stock Exchange (BEI) (Simamora et al., 2023). However, the rapid influx of new investors, particularly those with limited experience, has introduced behavioral challenges to the market, including impulsive trading and a tendency to follow market trends without adequate analysis, commonly referred to as “herding behavior” (Lubis & Kusuma, 2022).

One of the Indonesian capital market's most dynamic and volatile components, the energy sector is critical in supporting national economic growth. This sector includes industries engaged in the extraction and sale of both renewable and non-renewable energy sources, such as oil, gas, and coal. The sector's performance is heavily influenced by global commodity prices, which are affected by geopolitical events, economic cycles, and shifts in energy demand (Safalah & Paramita, 2024). Recent geopolitical tensions, such as the Russia-Ukraine conflict, have driven global oil price fluctuations, creating risks and opportunities for investors in energy-related stocks (Novianto & Paramita, 2023). These price changes have caused significant volatility in the Indonesia Stock Exchange's energy sector index (IDXENERGY), underscoring the importance of fundamental financial analysis for investors seeking to navigate this high-risk, high-reward market (Jaya et al., 2024).

The theoretical foundations of stock valuation through financial ratio analysis have evolved significantly in recent years, with contemporary research offering more nuanced perspectives on how financial information influences market prices. Financial ratios serve as essential analytical tools that distill complex financial information into comparable metrics, enabling more efficient evaluation of company performance. While classical valuation theories remain influential, recent studies have significantly refined our understanding of how these metrics function across market conditions and industry contexts. Building on this foundation, (Ball et al., 2016) published groundbreaking research examining how evolving accounting standards and reporting practices have altered investors' interpretation of financial ratios. They demonstrated that changes in the accounting landscape necessitate continuous reassessment of valuation models, a finding particularly relevant for sectors undergoing structural transformations, such as the energy industry amid the global energy transition and growing emphasis on sustainability metrics.

Complementing these perspectives, (Banker et al., 2022) conducted a comprehensive analysis exploring how digital transformation and technological disruption have reshaped the relative importance of various financial ratios in firm valuation. Their research revealed that intangible-intensive firms require different evaluation approaches than traditionally capital-intensive businesses, providing crucial insights for the energy sector as it increasingly incorporates technological innovations while maintaining significant physical infrastructure. These contemporary frameworks provide essential context for understanding how financial ratios function as signals of firm value. (Chen et al., 2022) validated specific financial ratios as reliable indicators of firm performance even during changing macroeconomic conditions. Their empirical findings demonstrated that specific financial metrics maintain predictive

power across economic cycles, reinforcing the utility of fundamental analysis in investment decision-making during market volatility, a characteristic frequently observed in commodity-driven sectors like energy.

Amid market volatility, financial ratios such as Dividend Yield (DY), Earnings Per Share (EPS), Price Earnings Ratio (PER), and Net Profit Margin (NPM) serve as essential tools for evaluating stock performance. Dividend Yield measures the annual return on investment through dividends relative to the stock price, providing investors with insights into the stability and profitability of a company's cash flow (Monteiro et al., 2020). Meanwhile, EPS reflects a company's ability to generate earnings on a per-share basis, serving as a key indicator of profitability and growth potential (Taufiqurrahman & Sudaryati, 2024). The Price Earnings Ratio evaluates how the market values a company's future earnings potential, with higher ratios often indicating optimistic growth expectations and the possibility of overvaluation (Adiandari & Astuti, 2023). Net Profit Margin, in turn, assesses a company's operational efficiency by examining the proportion of revenue that translates into profit, signaling whether a company can sustain long-term profitability amidst fluctuating market conditions (Kartiko & Rachmi, 2021).

Despite the widespread use of these financial ratios, empirical studies have produced varying results regarding their influence on stock prices. For instance, (Bustani et al., 2021) demonstrated that EPS and Dividend Payout Ratios significantly affected stock prices in the consumer goods sector, while Net Profit Margin had no measurable impact. In contrast, (Juliani et al., 2021) found that EPS, PER, and NPM significantly influenced stock prices in the pharmaceutical industry, reflecting sector-specific differences in how investors assess company performance. Similarly, (Anggeraini & Triana, 2023) highlighted the importance of dividend-related metrics. Dividend yield was a significant predictor of stock prices in the food and beverage sector. These divergent findings suggest that industry context shapes the relationship between financial ratios and stock prices.

Research on the energy sector has also produced mixed outcomes. (Anggeraini & Triana, 2023; Giuliani et al., 2021) reported that while Earnings Per Share significantly influenced stock prices, Net Profit Margin did not have a meaningful impact on energy stocks listed on the Indonesia Stock Exchange between 2018 and 2022. This inconsistency underscores the need for further research to determine how financial ratios function in a volatile, commodity-driven industry. Given the sector's strategic importance and high sensitivity to external factors, understanding these relationships is essential for investors and policymakers seeking to enhance market stability and investment returns.

The energy sector presents unique challenges for financial ratio analysis due to its distinct operational characteristics, regulatory environment, and exposure to commodity price volatility. (Damodaran, 2020) highlights how traditional valuation metrics may require reinterpretation when applied to commodity-driven industries such as energy. Specifically, he notes that earnings-based metrics like EPS and P/E ratios may be less informative in sectors where asset values and reserve quantities often drive long-term valuation more than current earnings. This theoretical perspective is supported by empirical evidence from (Reboredo & Ugolini, 2016), who discovered that traditional financial metrics explained a smaller portion of stock return variation in energy companies compared to other sectors, with macroeconomic factors and commodity prices exerting more significant influence. Similarly, (Kang et al., 2017) demonstrated that oil price changes significantly impact energy companies' stock returns, creating a unique valuation environment where external factors may sometimes overshadow company-specific financial performance.

The existing literature also reveals a methodological gap: most studies examining the relationship between financial ratios and stock prices in the energy sector have focused on individual metrics rather than their combined effects. (Kaspereit et al., 2017) emphasized the importance of considering how multiple financial indicators influence stock prices, particularly in industries with complex valuation dynamics. This multivariate perspective is especially relevant for the energy sector, where investors

must simultaneously evaluate operational efficiency, profitability, dividend stability, and growth prospects in fluctuating commodity prices and evolving energy transition scenarios.

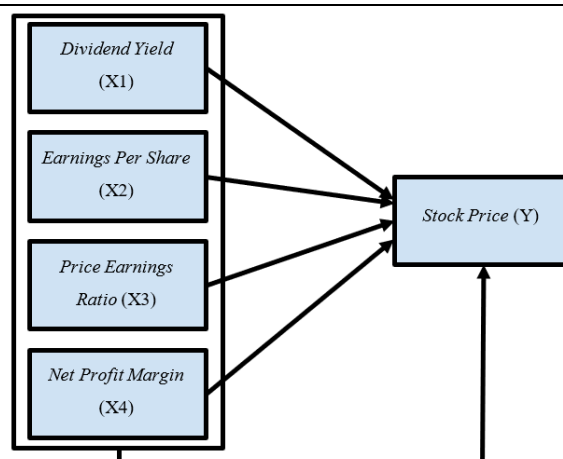
Furthermore, there is limited research on how financial ratio relevance evolves during periods of extreme market volatility, such as those triggered by geopolitical events affecting energy markets. As noted by (Novianto & Paramita, 2023), recent geopolitical tensions, such as the Russia-Ukraine conflict, have driven global oil price fluctuations, creating risks and opportunities for investors in energy-related stocks. These price changes have caused significant volatility in the Indonesia Stock Exchange's energy sector index (IDXENERGY), underscoring the need for research that examines how the relationship between financial ratios and stock prices may strengthen or weaken during periods of market stress.

To address these research gaps, this study proposes an integrated theoretical framework synthesizing insights from classical valuation theory and sector-specific models. (Cascino et al., 2014) advocate for contextual adaptations of financial ratio analysis that account for industry-specific factors. Building on this perspective, our study incorporates both traditional financial metrics and sector-specific considerations to develop a more robust understanding of stock price determinants in the energy sector. Specifically, we extend the fundamental valuation framework of (Bartram et al., 2016) by incorporating the commodity price sensitivity factor highlighted by (Kang et al., 2017). This integrated approach acknowledges that while fundamental financial ratios remain important signals of firm value, their interpretation and relative importance may differ in commodity-driven sectors like energy.

Our theoretical model hypothesizes that Dividend Yield (DY), Earnings Per Share (EPS), Price Earnings Ratio (PER), and Net Profit Margin (NPM) collectively provide comprehensive insights into energy companies' financial health, operational efficiency, and growth prospects. As emphasized by (Monteiro et al., 2020), Dividend Yield offers particularly valuable signals in capital-intensive industries like energy, where stable dividend policies often indicate management confidence in future cash flows despite commodity price volatility. Earnings Per Share, in alignment with (Taufiqurrahman & Sudaryati, 2024) findings, reflects a company's fundamental ability to generate profits per share, serving as a key indicator of operational success regardless of industry context.

The Price Earnings Ratio, as conceptualized by (Adiandari & Astuti, 2023), evaluates how the market values a company's future earnings potential, with the interpretation of "high" versus "low" PER being particularly context-dependent in cyclical industries like energy. Net Profit Margin, consistent with (Kartiko & Rachmi, 2021) framework, assesses a company's operational efficiency by examining the proportion of revenue that translates into profit, which is especially relevant in the energy sector where margins can be significantly affected by commodity price fluctuations beyond management control.

This study addresses these research gaps by empirically investigating the simultaneous and partial effects of Dividend Yield, Earnings Per Share, Price Earnings Ratio, and Net Profit Margin on the stock prices of energy companies listed on the Indonesia Stock Exchange from 2019 to 2023. Unlike previous studies that focused on individual variables or specific industries, this research adopts a comprehensive approach to evaluate how these key financial indicators collectively influence stock performance in the energy sector. By employing multiple linear regression analysis, the study seeks to provide a robust framework for understanding the dynamics between financial ratios and stock price fluctuations.



Source: Author Compilation, 2024

Figure 1. Research Concept Framework

The hypotheses formulated for this research are grounded in theoretical and empirical insights from prior studies. It is hypothesized that Dividend Yield, Earnings Per Share, Price Earnings Ratio, and Net Profit Margin have a significant simultaneous effect on stock prices, reflecting the combined influence of profitability, valuation, and return stability (Anggeraini & Triana, 2023; Juliani et al., 2021). Additionally, each variable is expected to exert a significant partial effect. Dividend Yield is anticipated to positively influence stock prices by offering stable income potential for investors (Monteiro et al., 2020). Earnings Per Share is hypothesized to drive stock price growth because it demonstrates a company's capacity to generate sustainable profits (Choiriyah et al., 2021). The Price Earnings Ratio is expected to shape market expectations regarding future growth, with high ratios indicating investor optimism (Juliani et al., 2021). Finally, Net Profit Margin is projected to positively impact stock prices by highlighting the company's operational efficiency and ability to control costs (Kartiko & Rachmi, 2021).

This study addresses an important gap in the literature by empirically testing how these ratios collectively and individually influence stock prices in Indonesia's energy sector during the 2019-2023 period, a timeframe characterized by significant market volatility. It offers a more nuanced understanding of how financial metrics should be interpreted and applied in the context of energy sector investments, contributing to both theoretical development and practical investment strategies in this critical economic domain.

The research aims to integrate these hypotheses and contribute to academic literature and practical investment strategies. It seeks to offer valuable insights for investors, financial analysts, and market participants in understanding the interplay between financial ratios and stock price movements in Indonesia's energy sector. The findings are expected to enhance data-driven investment decision-making, reduce speculative risks, and promote a more stable and efficient capital market ecosystem.

RESEARCH METHODS

This study adopts a quantitative approach to evaluate the influence of Dividend Yield (DY), Earnings Per Share (EPS), Price Earnings Ratio (PER), and Net Profit Margin (NPM) on the stock prices of energy companies listed on the Indonesia Stock Exchange (IDX) during the 2019–2023 period. The data collection primarily relies on secondary data from publicly available financial reports. These reports, sourced from IDX's official website (www.idx.co.id) and platforms such as Investing.com and TradingView, provide crucial insights into the annual performance of each company. In particular, stock

price data is drawn from these financial platforms to ensure consistency and accuracy. The use of secondary data is justified by its reliability and relevance, as financial statements are audited and adhere to established regulatory standards.

The population for this research comprises all energy companies listed on the IDX. Given the vast scope of the sector, a purposive sampling method was employed to focus on 13 energy companies that consistently published complete financial data and paid dividends during the study period. This selection criterion ensures that the sample is representative of the sector's financial and operational dynamics, allowing for robust analysis of the research variables. The sample size is deemed sufficient based on similar studies conducted in emerging and developed markets (Kartiko & Rachmi, 2021; Vinatra & Nirawati, 2024), ensuring that the findings can be reliable and generalizable within the sector.

Table 1.
Sample Filtering

No	Criteria	Amount
1	Energy sector companies listed on the Indonesia Stock Exchange (IDX) and active in stock trading during the 2019-2023 period.	62
2	Energy sector companies that present financial reports and have financial ratios presented in full according to the variables to be studied during the 2019-2023 period based on the sources used.	58
3	Energy sector companies that did not experience losses during the 2019-2023 period.	23
4	Energy sector companies that distribute Dividends during 2019-2023.	13

Source: Research Data, 2025

The variables in this study are operationally defined to maintain clarity and consistency. The dependent variable, stock price, represents the market valuation of each company's shares, influenced by internal and external factors. The independent variables are financial ratios commonly used in investment analysis. Dividend Yield (DY)= $\text{DPS/Stock Price} \times 100$ percent, indicating the return investors receive from dividends (Monteiro et al., 2020). Earnings Per Share (EPS)= $\text{Net Income/Total Outstanding Shares}$, reflecting a company's profitability (Taufiqurrahman & Sudaryati, 2024). The Price Earnings Ratio (PER)= Stock Price/EPS verifies market expectations regarding future growth (Adiandari & Astuti, 2023). Finally, Net Profit Margin (NPM)= $\text{Net Profit/Total Revenue} \times 100$ percent, highlighting a company's operational efficiency and ability to manage costs (Kartiko & Rachmi, 2021). These variables have been identified in previous studies as key determinants of stock price behavior across various sectors (Bustani et al., 2021; Juliani et al., 2021).

Multiple linear regression analysis was employed as the primary analytical tool to test the research hypotheses. This method was selected due to its ability to evaluate the simultaneous and partial effects of multiple independent variables on a single dependent variable. The model's assumptions were verified through classical assumption tests, including tests for normality, multicollinearity, heteroscedasticity, and autocorrelation, ensuring the validity of the regression results. The F-test was used to assess the overall significance of the regression model, while the t-test examined the significance of each predictor. Additionally, the coefficient of determination (R^2) measured how well the independent variables explained variations in the stock prices, providing an indicator of the model's explanatory power.

RESULT AND DISCUSSION

Understanding the dynamics behind stock price movements is crucial, particularly in the volatile energy sector, where fluctuations in global commodity prices, investor sentiment, and corporate financial performance play a pivotal role. This section presents the results obtained through a comprehensive analysis, encompassing descriptive statistics, diagnostic tests, and hypothesis testing to reveal the relationships between key financial ratios and stock prices. Each financial ratio, such as Dividend Yield, Earnings Per Share, Price Earnings Ratio, and Net Profit Margin, is examined to understand its impact on market valuation, individually and collectively, within the unique context of the energy sector. This discussion aims to provide a holistic narrative by combining statistical evidence with theoretical insights, addressing the consistency and discrepancies concerning prior studies. The findings are further enriched by cross-referencing relevant previous research, ensuring a robust interpretation highlighting significant patterns and offering valuable implications for investors and market analysts.

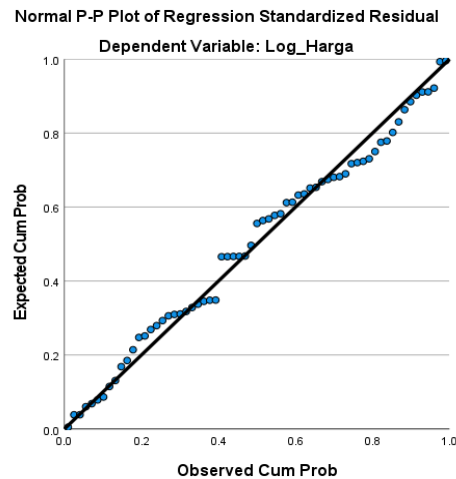
Table 2.
Descriptive Statistics

	N	Minimum	Maximum	Sum	Mean		Std. Deviation
					Statistic	Statistic	Statistic
X1	65	0,013	0,343	5,716	0,088	0,083	0,083
X2	65	4,57	16559,95	50252,47	773,115	2300,551	2300,551
X3	65	2,46	52,51	704,93	10,845	8,848	8,848
X4	65	0,008	0,463	9,878	0,152	0,118	0,118
Y	65	174	39050	242163	3725,58	6937,212	6937,212
Valid N (listwise)	65						

Source: Research Data, 2025

The descriptive analysis revealed key statistics for each variable, offering a detailed overview of data distribution and underlying patterns. Dividend Yield (X_1) displayed a mean of 0,088, with a minimum of 0,013 and a maximum of 0,343, suggesting a relatively consistent return across companies despite sector volatility. Earnings Per Share (EPS) (X_2) demonstrated a wider spread, with a mean of 773.1149, highlighting significant differences in profitability among energy firms. The Price Earnings Ratio (X_3), with a mean of 10,845 and a maximum of 52,51, reflected substantial market valuation disparities, signaling variations in investor expectations and growth projections. Net Profit Margin (NPM) (X_4) recorded a mean of 0,152, indicating varying levels of operational efficiency within the sector. The dependent variable, the stock price (Y), presented a mean of 3725,58 and ranged widely from 174 to 39,050, underscoring the sector's high volatility and the sensitivity of stock performance to both internal and external market dynamics.

The considerable range in stock prices ($SD = 6938,34$) reveals the heterogeneous nature of Indonesia's energy sector, where larger, established firms coexist with emerging players. This variability is particularly notable compared to other sectors in the Indonesia Stock Exchange, such as consumer goods or banking, which typically exhibit more homogeneous pricing patterns (Suryanto et al., 2022). The descriptive statistics further highlight the energy sector's unique investment profile, characterized by higher dividend yields (mean = 0,088) compared to the IDX average of 0,025 (Hartono & Utami, 2023), reflecting the sector's traditional emphasis on distributing profits to shareholders rather than reinvesting for growth—a pattern consistent with mature industries globally (Jiang et al., 2020).



Source: Research Data, 2025

Figure 2. P-Plot Normality Test

Table 3.
Kolmogorov-Smirnov Normality Test

N		65
Normal Parameters ^{a,b}	Mean	0,000
	Std. Deviation	0,899
Most Extreme Differences	Absolute	0,065
	Positive	0,063
	Negative	-0,065
Test Statistic		0,065
Asymp. Sig. (2-tailed) ^c		0,200 ^d
Monte Carlo Sig. (2-tailed) ^e	Sig.	0,706
	99% Confidence Interval	
	Lower Bound	0,694
	Upper Bound	0,718

Source: Research Data, 2025

Stock prices were log-transformed to ensure normal data distribution. The P-P plot of standardized residuals demonstrated a nearly perfect alignment along the diagonal line, indicating that the residuals were normally distributed. The Kolmogorov-Smirnov test yielded a significance value of 0.200, exceeding the 0.05 threshold. These findings affirm the assumption of normality that is necessary for regression analysis.

Table 4.
Autocorrelation Durbin-Watson Testing

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0,748 ^a	0,559	0,529	0,928	1,841

Source: Research Data, 2025

The Durbin-Watson statistic of 1.841 lies comfortably between the upper ($d_U = 1,731$) and lower ($d_L = 1,471$) bounds, confirming no evidence of autocorrelation in the model's residuals. This finding suggests that the errors are independent and do not exhibit any systematic patterns over time, a critical assumption for maintaining the integrity of regression analysis. The absence of autocorrelation strengthens the model's reliability, ensuring that parameter estimates remain unbiased and accurate. Consequently, this validation enhances confidence in the explanatory power of the financial ratios,

allowing for a more credible interpretation of their influence on stock price movements in the energy sector.

Table 5.
F-Test

ANOVA ^a					
Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	65,495	4	16,374	19,006	<0,001 ^b
Residual	51,691	60	0,862		
Total	117,185	64			

Source: Research Data, 2025

The ANOVA results revealed an F-statistic of 19,006 with a p-value of <0,001, indicating that Dividend Yield, EPS, PER, and NPM collectively have a statistically significant influence on stock prices. This result reinforces the hypothesis that when considered together, financial ratios play a vital role in shaping stock price dynamics, particularly in the energy sector. The findings emphasize how these indicators, in combination, guide market valuation by shaping investor confidence and expectations.

This significant simultaneous effect aligns with the efficient market hypothesis in its semi-strong form, as (Fama & French, 2018) articulated, which posits that stock prices reflect all publicly available information, including financial statements and ratios. The collective significance of these financial metrics supports the signaling theory proposed by (Connelly et al., 2011), suggesting that companies use financial performance indicators to signal their intrinsic value to the market. In the context of Indonesia's emerging market, this simultaneous effect is particularly noteworthy, as it demonstrates the growing sophistication of market participants in integrating multiple financial indicators into their valuation models despite the information asymmetries that typically characterize emerging economies.

Table 6.
t-Test

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5,513	0,311		17,731	<0,001
	X ₁	5,522	1,989	0,338	2,777	0,007
	X ₂	0,000	0,000	0,353	3,673	<0,001
	X ₃	0,043	0,015	0,280	2,801	0,007
	X ₄	4,065	1,195	0,354	3,402	0,001

Source: Research Data, 2025

The partial analysis yielded significant results for all variables. Dividend Yield had a t-value of 2.777 (p = 0.007), indicating a positive and significant impact on stock prices. EPS recorded the highest influence with a t-value of 3.673 (p < 0.001), highlighting its critical role in shaping investor expectations. PER and NPM also demonstrated significant positive effects, with t-values of 2.801 and 3.402, respectively. These results confirm that each variable individually contributes to the pricing dynamics of energy stocks.

Table 7.
R² Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,748 ^a	0,559	0,529	0,928

Source: Research Data, 2025

The model's R^2 value was 0,559, signifying that the combined effects of Dividend Yield, EPS, PER, and NPM can explain 55.9 percent of the variation in stock prices. The adjusted R^2 of 0,529 accounts for the number of predictors in the model, reflecting a robust explanatory power for the independent variables. This result indicates that while the financial ratios provide substantial insights into stock price behavior, other factors, such as macroeconomic conditions and geopolitical influences, may also play a role.

The results of this study reveal that **Dividend Yield** has a positive and statistically significant effect on stock prices. With a t-value of 2,777 and a significance level of 0,007, Dividend Yield demonstrates its role as an essential factor in investor decision-making. This finding aligns with (Anggeraini & Triana, 2023), who found that higher Dividend Yields positively influence stock prices by signaling a company's ability to generate stable returns despite market volatility. This relationship contrasts with findings from developed markets where (Sierpińska-Sawicz & Sierpińska, 2022) found insignificant relationships in the Poland energy sector, highlighting how market maturity and investor profiles influence dividend policy impact on stock valuations.

Similarly, **Earnings Per Share (EPS)** significantly impacts stock prices, as evidenced by a t-value of 3,673 and a p-value of <0,001. This result indicates that EPS plays a central role in shaping investor perceptions of a company's profitability and growth potential. Higher EPS values reflect the company's ability to generate earnings for each outstanding share, strengthening investor confidence. These findings are consistent with research by (Vinatra & Nirawati, 2024), who emphasized that EPS is a crucial determinant of stock valuation in sectors with high volatility, such as energy. Cross-market comparisons reveal similar strength in Nigeria (Bassey. Bassey Eyo et al., 2016) Investors are particularly sensitive to EPS changes in these markets, as earnings stability is often interpreted as a sign of effective financial and operational management.

The **Price Earnings Ratio (PER)** also significantly influences stock prices, with a t-value of 2,801 and a significance level of 0,007. PER serves as a valuation metric that helps investors assess whether a stock is overpriced or underpriced concerning its earnings. (Juliani et al., 2021) highlighted that PER reflects market expectations about a company's future earnings potential. This relationship aligns with behavioral finance theory, particularly sentiment-driven investing with PER functioning as a heuristic for gauging market sentiment where analyst coverage is less comprehensive than in developed markets (Anand et al., 2021). In this case, high PER values indicate optimism regarding growth prospects, prompting investors to pay a premium for the stock. Conversely, low PER values may suggest undervaluation or concerns over the company's future performance. In this study, the significance of PER underscores its relevance as an indicator of market sentiment and stock valuation in the energy sector, where investor expectations about future earnings can shift rapidly due to external factors such as changes in global commodity prices.

Finally, **Net Profit Margin (NPM)** is a significant predictor of stock prices, with a t-value of 3.402 and a significance level of 0,001. NPM measures a company's efficiency in converting revenue into net profit, which is particularly important in the capital-intensive energy sector. Companies that maintain high NPMs demonstrate superior cost management, which enhances their competitiveness and resilience to external shocks. This finding supports the work of (Kartiko & Rachmi, 2021), who noted that NPM significantly affects stock prices in industries exposed to volatile market conditions. Investors view strong NPM performance as a sign of operational stability, making companies with high margins more attractive in periods of market uncertainty.

The F-test results further validate these variables' collective influence, with an F-statistic of 19,006 and a significance level of <0.001. This result supports the hypothesis that Dividend Yield, EPS, PER, and NPM explain stock price variations jointly. However, the R^2 value 0,559 indicates that 44.1 percent of stock price fluctuations are attributable to factors outside the model. This research suggests that macroeconomic factors, such as global energy prices, geopolitical risks, and government

regulations, also play a crucial role in determining energy sector stock prices, as (Safalah & Paramita, 2024) noted.

These findings underscore the need for investors to adopt a comprehensive approach to financial analysis, integrating both fundamental and external factors to make informed decisions. On the other hand, companies must continuously optimize their operational and financial performance to enhance their attractiveness in the capital market. Overall, this study reaffirms the critical role of financial ratios in shaping investor behavior and stock valuation in the dynamic and high-risk energy sector.

CONCLUSION AND RECOMMENDATION

This study confirms that Dividend Yield, Earnings Per Share, Price Earnings Ratio, and Net Profit Margin significantly influence stock prices in Indonesia's energy sector, both simultaneously and individually, with EPS demonstrating the strongest impact. These findings support signaling theory by showing how financial metrics bridge information asymmetry between companies and investors, while the substantial unexplained variation (44.1 percent) highlights the influence of external factors like commodity price fluctuations and geopolitical events. For energy companies, these results suggest implementing consistent dividend policies, prioritizing sustainable earnings growth, enhancing operational efficiency to improve profit margins, and clearly communicating growth strategies aligned with Indonesia's evolving energy landscape. Investors should adopt a comprehensive analytical approach incorporating all four ratios while giving precedence to EPS and NPM when evaluating investment opportunities, and regulators should strengthen reporting requirements and develop targeted financial literacy programs to improve market efficiency and stability.

Future research should address current limitations by expanding the variable set to include debt levels and growth rates, incorporating external factors such as macroeconomic conditions and regulatory changes, extending the timeframe to identify cyclical patterns, employing alternative methodologies like panel data analysis with fixed effects, and conducting comparative studies across different emerging markets and economic sectors. Exploring potential non-linear relationships between financial ratios and stock prices would provide more nuanced guidance, while integrating sustainability metrics would reveal how ESG factors interact with traditional financial ratios in shaping market valuations. As Indonesia's energy sector navigates the complex challenges of energy security, transition, and sustainability, understanding these valuation dynamics will become increasingly important for company executives seeking to optimize financial policies, investors constructing portfolios, and regulators working to enhance market efficiency and stability.

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