


The Impact Of Return On Assets And Earnings Per Share On Energy Sector Stock Prices

Renil Septiano^{1*}, Fadel Vageno Shadam², Dewi Zulvia³, Laynita Sari⁴, Marwan⁵

^{1*,2,3,4}Sekolah Tinggi Ilmu Ekonomi KBP, Padang, Indonesia, ⁵Universitas Negeri Padang, Padang, Indonesia

Article Info	ABSTRACT
<p>Keywords: Return On Assets, Earnings Per Share, Stock Prices, Energi Sector.</p>	<p>Stock price fluctuations in energy sector companies are often influenced by various factors, including the company's financial performance. One indicator that can affect stock price fluctuations is the profitability ratio, which includes the Return on Assets (ROA) and Earning Per Share (EPS) ratios. This study aims to analyze the effect of profitability ratios on stock prices of energy sector companies in Indonesia. The method used in this study is panel data regression, which allows analyzing the relationship between independent and dependent variables by taking into account variations between companies and over time. The results show that the Return on Assets (ROA) ratio has a positive effect on stock prices of energy sector companies, meaning that the higher the ROA, the higher the company's stock price. On the other hand, the Earning Per Share (EPS) ratio does not show a significant effect on stock prices in the energy sector. These findings contribute to the understanding of the factors that influence stock prices in the energy sector, as well as their implications for investors and company managers in making investment decisions and financial policies.</p>
<p>This is an open access article under the CC BY-NC license</p> 	<p>Corresponding Author: Renil Septiano Sekolah Tinggi Ilmu Ekonomi KBP Jl. Khatib Sulaiman, Padang renil.septiano@akbpstie.ac.id</p>

INTRODUCTION

Stocks are an investment instrument that plays an important role and is an integral part of the capital market (Septiano & Sari, 2024), (Septiano, Putri, et al., 2023), (Septiano & Sari, 2024). Stock prices are influenced by various factors, including fundamental factors and external factors related to certain industries and sectors, such as the energy sector.

Energy sector stocks Refer to stocks originating from companies engaged in marketing products and services related to the use of natural resources, both renewable and non-renewable as alternative energy (Pratomo Eryanto, 2023). The profits of energy companies are highly dependent on world commodity prices, such as oil, gas, coal, and others.

In early 2023, energy sector stock prices experienced a significant increase compared to other sectors. The energy sector stock index has experienced a surge of 3.03%, which has a positive impact on the Composite Stock Price Index on the Indonesia Stock Exchange. This increase caused the IHSG to rise by 61.51 points to 6,935.3 on Tuesday, February 7, 2023 (Investor.id/Parluhutan Situmorang, 2023).

In mid-2023, there was a decline in the energy sector stock index. Quoted from Nurmutia (2023), Fajar Dwi Alfian said, PT Bayan Resources Tbk (BYAN) was the main factor in the decline in the energy sector stock index by 10 percent year to date as of August 29, 2023.

The fluctuation of energy sector stock prices is influenced by various factors, including profitability ratios such as Return on Assets (ROA). ROA is one of the profitability ratios used to assess the extent to which a company can utilize its assets to generate profits. ROA provides an overview of a company's performance based on the profits generated from the use of assets in the past. This can be a consideration for investors before they decide to invest in shares in the company.

In addition to ROA, the Earnings Per Share (EPS) ratio also has an influence on the price of energy sector stocks. EPS is an important indicator and is often considered by potential investors. EPS measures the earnings per share owned by shareholders. The higher a company's EPS, the greater the profit generated per share, which can have a positive impact on stock prices. Therefore, EPS is one of the important factors considered by potential investors before deciding to invest in energy sector stocks.

Based on the above phenomenon, the objectives of this study will be described as follows: 1) to determine the effect of return on assets on the stock price of the energy sector in 2018-2022. 2) to determine the effect of earnings per share on the stock price of energy sector companies in 2018-2022.

There are several previous studies that discuss the relationship between Return on Assets (ROA) and Earnings Per Share (EPS) on stock prices. The first is a study conducted by Fiona Mutiara Efendi & Ngatno (Fiona Mutiara Efendi & Ngatno, 2018) entitled "The Effect of Return on Assets (ROA) on Stock Prices with Earnings Per Share (EPS) as Intervening (Case Study on Textile and Garment Sub-Sector Companies Listed on the Indonesia Stock Exchange for the 2013-2016 Period)" states that ROA does not have a significant effect on stock prices, the variable that affects stock prices is EPS. In addition, the EPS variable can link ROA to stock prices. Meanwhile, the results of Santy's (Santy, 2017) study entitled "The Effect of ROA, ROE, and EPS on Stock Prices of PT. Garuda Indonesia Tbk", partially Return on Assets has a positive effect on stock prices, partially Return on Equity has a negative effect on stock prices, and Earnings Per Share has a positive effect on stock prices.

The difference between this study and previous studies is that it does not use Earnings Per Share (EPS) as a mediating variable. The object of this study is companies engaged in the energy sector. Based on the above phenomenon, the researcher is interested in conducting a study entitled The Impact of Return On Assets (ROA) and Earnings Per Share (EPS) To Energy Sector Stock Prices.

Literature Review

Retur non Assest

Return On Asset is one of the profitability ratios in financial statement analysis. This ratio is most often highlighted because it is able to show the success of a company in generating profits in the past to then become a reference in the future. ROA is included in one

of the profit ratios. So, the higher the ROA value of a company, the better the company's performance in generating net profit (Septiano, Anggriana, et al., 2023).

According to Tandelilin (2010), ROA is a ratio that describes the extent to which a company's ability to utilize all its assets to generate net profit after tax (Thionita, 2020). From the definition above, it can be concluded that ROA is a profitability ratio that measures the comparison between net profit after deducting interest expense after tax. Return on Assets (ROA) is calculated by dividing the company's net income by its total assets. Here is the formula for calculating Return on Assets:

$$ROA = \frac{\text{Earnings After Tax}}{\text{Amount Of Assets}} \times 100 \quad (1)$$

Earnings Per Share

Earning Per Share (EPS) is a tool for analyzing the level of company profitability that uses the conventional profit concept. According to Hendrata (2018:27), EPS is a ratio that shows how much profit the company makes compared to the weighted average number of shares outstanding (Nurita, 2022). A large Earning Per Share (EPS) illustrates how much capital the company has to distribute to investors. An increase in Earnings Per Share (EPS) indicates that the company has succeeded in increasing the level of investor prosperity so that investors assume that the company can provide large earnings per share, this will increase investor confidence. Here is the formula for calculating Return on Assets (Kasmir, 2008):

$$EPS = \frac{\text{Earnings After Tax}}{\text{Amount Of Shares}} \times 100 \quad (2)$$

Stock Prices

Stocks are proof of ownership of part of the capital in a company. According Zulfikar (Zulfikar, 2016), there are several types of stocks:

a. Common stock

Common stock is usually always present in the capital stock structure. Types of common stock include:

1. Blue chip stocks. Large issued stocks, which have shown the ability to earn profits and pay dividends.
2. Growth stocks. Stocks issued by companies whose profits and market share are growing.
3. Emerging growth stocks. Stocks issued by companies that are relatively smaller but have strong resilience in less than ideal economic conditions.
4. Income stocks. Stocks that pay dividends exceeding the average income.
5. Cyclical stocks. Stocks of companies that have fluctuating profits and are greatly influenced by the business cycle.
6. Defensive stocks. Stocks of companies that can survive and remain stable from uncertain periods or conditions.
7. Speculative stocks. In principle, all stocks traded are speculative stocks, because when buying there is no certainty of the profit that will be obtained.

b. Preferred shares

In practice, there are several types of preferred stocks, namely:

1. Commulative preferred stocks

This type of preferred stock gives its owner the right to dividend distribution that is cumulative in a certain percentage or amount. So if in a certain year the dividend paid is insufficient or not paid at all, then this will be calculated in the following years.

2. Non-commulative stocks

This type of shareholder gets priority in dividend distribution up to a certain percentage or amount, but not cumulative.

3. Participating preferred stocks

In addition to receiving fixed dividends, this type of shareholder also receives additional dividends (extra dividends).

METHODS

This study used 20 samples is a quantitative research, where quantitative research is research that collects, processes, analyzes, and presents data based on the amount or quantity that is done objectively to solve a hypothesis (Duli, 2019). Quantitative research is an approach taken for managerial and economic decision making (Kuncoro, 2018).

The object of this study is energy sector companies listed on the Indonesia Stock Exchange (IDX) in 2018-2022. Energy sector companies are companies that utilize non-renewable natural resources such as gas, oil, coal and so on. The data used in this study is secondary data. Secondary data is data obtained from other parties who have collected the data previously.

The data analysis technique in this study uses descriptive statistical analysis, model feasibility test (Chou test and Hausman test), panel data regression test, classical assumption test (normality test and multicollinearity test) and hypothesis test (t-test and coefficient of determination test). The type of data used in this study is panel data. Panel data is a combination of time series data and cross-section data (Rifkhan, 2022), so that the characteristics of the two data are also combined. These characteristics consist of several objects and have a time period.

The data used in this study is secondary data. Secondary data is data obtained from other parties who have collected the data previously. The data analysis technique in this study uses descriptive statistical analysis, model feasibility test (Chou test and Hausman test), panel data regression test, classical assumption test (normality test and multicollinearity test) and hypothesis test (t-test and coefficient of determination test).

RESULTS AND DISCUSSION

Table 1. Deskriptive Statistics

	Y	X1	X2
Mean	2090.500	1.730600	31.81167
Median	344.0000	1.665000	0.080200
Maximum	39025.00	58.52000	1094.000

	Y	X1	X2
Minimum	50.00000	-73.29000	-126.5200
Std. Dev.	5107.799	19.72543	147.6330
Observations	100	100	100

Source : Data processed by researchers, 2024

From the table above, 100 observation data were obtained for this study. The stock price data shows that the maximum value is 39025, recorded at Indo Tambang Raya Megah Tbk. in 2022. Then the lowest value of the stock price is 50. The average stock price value of energy sector companies on the Indonesia Stock Exchange in 2018-2022 is 2090,500.

In the first independent variable, namely Return On Assets (ROA), the maximum value is 58.52000, which is found in Mitrabara Adiperdana Tbk. in 2022. Then the lowest value in the Return On Assets (ROA) variable is -73.29000. The average Return On Assets (ROA) value in energy sector companies on the Indonesia Stock Exchange in 2018-2022 is 1.730600.

In the second independent variable, namely Earnings Per Share (EPS), the maximum value is 1094,000, which is found in Bukit Asam Tbk. in 2022. Then the lowest value in the Earnings Per Share (EPS) variable is -126.5200, which is found in Ratu Prabu Energi Tbk. in 2019. The average value of the Earnings Per Share variable in energy sector companies listed on the Indonesia Stock Exchange in 2018-2022 is 31.81167.

Table 2. Chou Test Results

Effects Test	Statistic	d.f.	Prob.
Cross-section F	14.049636	(19,78)	0.0000
Cross-section Chi-square	148.667060	19	0.0000

Source : Data processed by researchers, 2024

Based on the table above, the result of the probability cross-section chi-square is 0.0000 (< 0.05), which shows that H_a is accepted and H_0 is rejected, with the conclusion that the fixed effect model is better than the common effect model in this study.

Table 3. Hausman Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	1.683832	2	0.4309

Source: Data processed by researchers, 2024

Based on the results of data processing in the table above, the random cross-section value obtained is 0.4309 (> 0.05), meaning that H_0 is rejected and H_a is accepted, it can be concluded that the random effect model is better than the fixed effect model.

Table 4. Panel Data Regression Data Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2020.653965	4120.209304	0.4800390	
X1	70.0132019	14003.365794	60.0004	
X2	-1.6131883	188920.050587	-30.6141	

Source: Data processed by researchers, 2024

Based on the results of the Random Effect Model test above, the following equation is obtained:

$$Y = 2020.653 + 70.01320X_1 - 1.613188X_2$$

The results of the equation above are:

- The results of the equation above obtained a constant value of 2020.653. This means that if the Return On Assets and Earnings Per Share variables remain or = 0, then the value of the stock price variable is 2020.653.
- The value of the Return On Assets (ROA) variable is 70.01320, which means that if the ROA value increases by 1 unit on average, then the ROA value increases by 70.01320 if the value of the other independent variables remains constant.
- The value of the Earnings Per Share (EPS) variable is -1.613188, which means that if the EPS value increases by 1 unit on average, the EPS value will decrease by -1.613188 if the other independent variables remain constant.

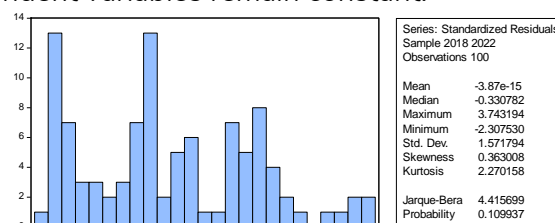


Figure 1. Normality Test Results

Source: Data processed by researchers, 2024

Based on the results of the normality test using the Jarque-Berra Test above, a probability value of 0.109937 (>0.05) was obtained. This means that the data is normally distributed and the classical assumption test of normality has been met.

Table 5. Multicollinearity Test Results

	X1	X2
X1	1.000000	0.316728
X2	0.316728	1.000000

Source: Data processed by researchers, 2024

Based on the results of the multicollinearity test above, it is known that the relationship between the variables Return On Assets (X1) and Earnings Per Share (X2) is 0.316728. The results of the multicollinearity test above show the correlation value between variables <10, which means that there are no symptoms of multicollinearity from the data of this study and it is suitable for use in this study.

Table 6. T-Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2020.653	965.4120	2.093048	0.0390
X1	70.01320	19.14003	3.657946	0.0004
X2	-1.613188	3.188920	-0.505873	0.6141

Source: Data processed by researchers, 2024

Based on the first hypothesis test, namely Return On Assets (ROA), a probability value of 0.0004 (< 0.05) was obtained, meaning that H1 is accepted. In conclusion, the Return On Assets (ROA) variable has a significant effect on the stock price of energy sector companies on the Indonesia Stock Exchange in 2018-2022.

Based on the second hypothesis test, namely Earnings Per Share (EPS), a probability value of 0.6141 (> 0.05) was obtained, meaning that H2 was rejected. In conclusion, the Earnings Per Share (EPS) variable does not affect the stock price of energy sector companies on the Indonesia Stock Exchange in 2018-2022.

Table 7. Coefficient of Determination

R-squared	0.123287
Adjusted R-squared	0.105210

Source: Data processed by researchers, 2024

From the results of data processing using E views 9, the Adjusted R-squared value is obtained, namely 0.105210. It can be interpreted that the contribution of the influence of the independent variable to the dependent variable simultaneously or simultaneously is 10.5%. While the remaining 89.5% is influenced by other variables outside this study.

Discussion

The Effect of Return on Assets on Stock Prices

In partial testing, the ROA value is < 0.05 (0.0004). This can be interpreted that the profitability ratio of Return On Assets (ROA) has a significant effect on the stock price of energy sector companies on the Indonesia Stock Exchange during 2018 to 2022.

The Effect of Earnings Per Share on Stock Prices

In partial testing, the probability value of Earnings Per Share (EPS) > 0.05 (0.6141), which means that the Earnings Per Share variable does not affect the stock price of the energy sector on the Indonesia Stock Exchange in 2018-2022. This study is different from several previous studies that showed that Earnings Per Share (EPS) affects stock prices. This could be due to the period and object of the study, or it could also be due to the condition of the company during that period.

CONCLUSION

This study aims to analyze the effect of return on assets (ROA) and earnings per share (EPS) variables on stock prices in energy sector companies. Based on the results of the analysis, it was found that ROA has a positive effect on stock prices, indicating that the company's financial performance as measured by return on assets can affect market perception of the company's value, thus potentially increasing stock prices. On the other hand, EPS does not have a significant effect on stock prices, which may be caused by uncertain economic conditions and the dynamics of the energy industry which are often influenced by external factors, such as fluctuations in global energy prices and government policies. Overall, these findings indicate that although the company's financial performance as reflected in ROA can play an important role in determining stock prices, other factors such as macroeconomic

conditions and industrial sectors must also be considered in analyzing the movement of stock prices in energy sector companies.

REFERENCE

- Duli, N. (2019). *Metodologi Penelitian Kuantitatif*. Deepublish.
- Fiona Mutiara Efendi & Ngatno. (2018). Pengaruh Return On Assets (ROA) Terhadap Harga Saham dengan Earning Per Share (EPS) sebagai Intervening (Studi Kasus pada Perusahaan Sub Sektor Tekstil dan Garmen yang terdaftar di Bursa Efek Indonesia Periode 2013-2016). *Administrasi Bisnis*, 7, 2.
- Investor.id/Parluhutan Situmorang. (2023). *Sektor Energi Melesat, Berikut Saham-Sahamnya yang Naik Paling Tinggi*. Investor.Id.
- Kasmir. (2008). *Analisis laporan keuangan / Dr. Kasmir*. Rajawali Pers.
- Kuncoro, M. (2018). *Metode Kuantitatif* (5th ed.). UPP STM YKPN.
- Nurita, E. (2022). Pengaruh Return on Asset (ROA) dan Earning Per Share (EPS) Terhadap Harga Saham Pada PT Indofood Sukses Makmur Tbk Periode 2011-2020. *Jurnal EMT KITA*, 6(2), 227–234. <https://doi.org/10.35870/emt.v6i2.620>
- Nurmutia, E. (2023). *Saham Sektor Energi Lesu pada 2023, Ini Penyebabnya*. Liputan6.Com.
- Pratomo Eryanto. (2023). *Daftar Saham Energi Indonesia Terbaik di 2023, Beserta Penjelasan Kinerja*. Investbro.Id.
- Rifkhan. (2022). *Membaca Hasil Regresi Data Panel* (M. Dewi (ed.)). Cipta Media Nusantara.
- Santy, V. A. D. (2017). Pengaruh ROA, ROE, dan EPS Terhadap Harga Saham PT Garuda Indonesia Tbk. *Jurnal Ilmu Dan Riset Manajemen*, 6(9), 1–93.
- Septiano, R., Anggriana, D., Sari, L., Tinggi, S., Ekonomi, I., Kbp, ", & Padang, ". (2023). *Pengaruh Modal Kerja Dan Penjualan Terhadap Laba Bersih Pada Perusahaan Otomotif Yang Terdaftar Di Bursa Efek Indonesia*. 3(2), 514–524.
- Septiano, R., Putri, O. H., & Shadam, F. V. (2023). International Conference on Economy , Management , and Business (IC-EMBus). *International Conference on Economy , Management , and Business (IC-EMBus)*, 1, 444–454.
- Septiano, R., & Sari, L. (2024). *Perubahan net profit margin dan dampaknya terhadap harga saham: tinjauan pada industri makanan dan minuman 1,2. 4*, 731–738.
- Thionita, V. (2020). *Definisi Return on Asset (ROA): Manfaat, Rumus, dan Contohnya*. Finansialku.Com.
- Zulfikar. (2016). *Pengantar Pasar Modal dengan Pendekatan Statistika*. Deepublish.