

The Effect of Earning Per Share, Return on Assets, Return on Equity, Debt to Equity Ratio on Stock Prices (Study on Cigarette Companies Listed on the Indonesian Stock Exchange for the Period 2015-2017)



Yani Dwi Restanti¹, Yanto Budi Prasetya², Lutfi Anju Muzzuhriyatul Khasanah³

^{1,2,3}Fakultas Ilmu Administrasi, Universitas Pamyatan Daha Kediri

ABSTRACT: This study aims to determine partially, simultaneously and dominantly the effect of Earning Per Share (EPS), Return On Assets (ROA), Return On Equity (ROE), Debt to Equity Ratio (DER) on Stock Prices in Cigarette Companies Listed on the Indonesia Stock Exchange for the period 2015-2017. The results of research processed with the SPSS programme that the Adjusted R Square value in the coefficient of determination analysis results shows a value of 0.931 or 93.1%. This shows that the four independent variables, namely Earning Per Share (EPS), Return On Assets (ROA), Return On Equity (ROE), Debt To Equity Ratio (DER), affect the stock price variable by 93.1%. While the remaining 6.9% is influenced by other factors besides the factors proposed in this study. The simultaneous test results (F test) show a significance value of $0.000 < 0.05$, meaning that Earning Per Share (EPS), Return On Assets (ROA), Return On Equity (ROE), Debt To Equity Ratio (DER), simultaneously have a positive and significant effect on stock prices in cigarette sub-sector companies listed on the Indonesian Stock Exchange for the period 2015-2017. Partial results (T test) show that the significance value of Earning Per Share (EPS) $0.004 < 0.05$ means that EPS has a positive and significant effect on stock prices, Return On Assets (ROA) value $0.038 < 0.05$ means that ROA has a positive and significant effect on stock prices, Return On Equity (ROE) value $0.049 < 0.05$ means that ROE has a positive and significant effect on stock prices, Debt To Equity Ratio (DER) value $0.049 < 0.05$ means that DER has a positive and significant effect on stock prices in cigarette companies.

KEYWORDS: Earning Per Share (EPS), Return On Assets (ROA), Return On Equity (ROE), Debt to Equity Ratio (DER), and Stock Price.

PRELIMINARY

Investment is a commitment to a number of funds or other sources of funds made at this time, with the aim of obtaining future profits (Tandelilin, 2010: 2). One of the most interesting things about studying the capital market is the rise and fall of stock prices. In the capital market, it is precisely the ever-changing prices that make the Stock Exchange very attractive to investors. Where with an increase in stock prices will make investors experience significant profits from the difference in the sale of the share price even though they will experience losses if the share price decreases in the selling price.

Shares are proof of ownership or proof of participation in capital deposits in a company. The form of shares is a piece of paper that explains that the owner of the paper is the owner of the company that issued the securities. The portion of ownership is determined by how much investment is invested in the company. Information about the company's performance and financial condition of a company can affect the stock price, which illustrates the company's value. So the higher the value or price of a share in the company, the company is categorised as having good quality.

Stock prices are influenced by factors internal and external to the company. The company's internal factors include cash flow, earnings, and other accounting information contained in a company's financial statements. And external factors include stock transactions, deposit interest rates, public confidence in the capital market, political conditions and other macroeconomic policies. The company's financial performance is reflected in the financial statements. Financial statements are designed to help users of reports to identify the relationship of variables from financial statements. Some financial ratios that can affect stock prices include Earning Per Share (EPS), Return On Assets (ROA), Return On Equity (ROE), Debt to Equity Ratio (DER). These ratios can be seen from the company's financial statements.

Earning Per Share (EPS) this ratio shows the ability of each share to create profit in a financial reporting period, EPS is said to be the most important component in determining stock prices, because dividends are paid from earnings and also because

The Effect of Earning Per Share, Return on Assets, Return on Equity, Debt to Equity Ratio on Stock Prices (Study on Cigarette Companies Listed on the Indonesian Stock Exchange for the Period 2015-2017)

there is a positive relationship between changes in earnings and stock prices, this indicates that if the EPS value of a company increases, the company's stock price will also increase.

Return On Assets (ROA) this ratio is used to measure how well management uses all assets to generate profits or profits. This ratio relates profit after tax to total assets. Therefore, the greater the company's ROA, the greater the level of profit achieved by the company.

Return On Equity (ROE) is the ratio between Earning After Interest and Tax and Equity. ROE ratio information can provide an overview of the extent to which the company's ability to generate profits earned by shareholders on capital so that if the company's ROE value increases, it will affect the company's value which will increase, causing the stock price in the market to increase as well so as to attract investors to buy shares or to invest in the company.

Debt to Equity Ratio (DER) is the ratio of debt to capital. This ratio measures how far the company is financed by debt, where the higher this ratio illustrates unfavourable symptoms for the company. The increase in debt in turn will affect the size of the net profit available to shareholders including dividends received because the obligation to pay debt takes precedence over dividend distribution. Debt to Equity Ratio represents solvency used to measure the level of leverage that shows the company's own capital to fulfil its obligations. The greater the amount of debt used for the company's capital structure, the greater the amount of liability. An increase in the amount of debt will affect the size of the net income available to shareholders including dividends to be received, because debt payments take precedence over dividend payments. Based on this description, the authors conducted a study with the title The Effect of Earning Per Share, Return on Assets, Return on Equity Debt to Equity Ratio on Stock Prices (Study of Cigarette Companies Listed on the Indonesia Stock Exchange for the period 2015-2017).

METHODS

The type of research used is explanatory, the data used is secondary data obtained from the Indonesia Stock Exchange Investment Gallery (GI-BEI) POLITEKNIK Kediri located on Jl. Lingkar Maskumbang, Sukorame, Mojoroto Kediri City by retrieving secondary data through the Official Website of the Indonesia Stock Exchange <http://www.idx.co.id> by selecting cigarette sub-sector companies listed on the Indonesia Stock Exchange for the period 2015-2017. Data collection methods with the documentation method, namely by recording or documenting the data listed on the IDX annual report. There are 4 research samples taken with purposive sampling technique. Definition of Operational Variables, Free Variables, independent variables are financial ratios from financial statements published by companies that are sampled. The financial ratios used to measure company performance are as follows:

1. Earning Per Share (EPS) to determine the results of the comparison between the income to be received by shareholders or investors and the income generated (net income) to the share price of each sheet in the company (Darmadji and Fakhruddin, 2006)." describes the profitability of the company that is reflected in each share. The following is the Earning Per Share formula" (Irham Fahmi 2014: 289):

$$\text{Earning per Share} = \text{EA} / (\text{Average Ordinary Shares in Circulation})$$

2. Return On Assets (ROA) is a ratio that shows the return on the total assets used in the company. This ratio is also a measure of the effectiveness of management in managing its investments "(Kasmir, 2010: 202).

$$\text{Return On Assets} = (\text{Profit After Tax}) / (\text{Total Assets}) \times 100\%$$

3. "Return On Equity (ROE) is a ratio to measure net profit after tax with own capital. The following is the Return On Equity Formula according to "(Kasmir, 2010: 204):

$$\text{Return On Equity} = (\text{Earning After Interest and tax}) / \text{Equity} \times 100\%$$

4. "Debt to Equity Ratio (DER) Is a comparison between company debt and company capital. The following is the Debt to Equity Ratio Formula according to "(Martono and Harjito, 2003: 59):

$$\text{Debt to Equity Ratio} = (\text{Total Debt}) / (\text{Total Equity (Capital)}) \times 100\%$$

5. Dependent Variables (Dependent) are variables that are influenced by independent variables. The dependent variable in this study is the stock price.
 - a. The data analysis used in this research is Multiple Linear Regression with SPSS tools, with the following data analysis techniques: To measure the validity and reliability of the instrument using validity test and reliability test.
 - b. Descriptive Analysis of the Coefficient of determination R (Square) and Inductive Analysis which includes: Classical Assumption Test; Multiple Linear Regression: Multiple Correlation Test.
 - c. Hypothesis tested with F test and t test

The Effect of Earning Per Share, Return on Assets, Return on Equity, Debt to Equity Ratio on Stock Prices (Study on Cigarette Companies Listed on the Indonesian Stock Exchange for the Period 2015-2017)

RESULTS AND DISCUSSION

Multiple Linear Regression Analysis Results

The results of multiple linear regression can be included in the equation as follows:

$$\text{Share Price} = -12638.389 + 12.46 \text{ EPS} + 3681.68 \text{ ROA} + 2917.62 \text{ ROE} + 36522.34 \text{ DER} + e$$

Hypothesis Test Results

Hypothesis testing is used to measure the accuracy of the regression function in estimating actual values. This hypothesis test includes the T test (Partial), F test (Simultaneous) and the coefficient of determination (adjusted R Square).

There are 6 (six) hypotheses proposed in this study. Testing the first, second, third, and fourth hypotheses to determine the effect of the independent variable partially on the dependent variable using a partial test (tcount). The regression coefficient is used to determine the effect of EPS, ROA, ROE, DER variables partially on stock prices.

To test the significance of the regression coefficient, titung is used. If the error probability of thitung is smaller than a certain significance level (significant 5%), then the independent variable partially has a significant effect on the dependent variable. The results of the regression coefficient calculation using the SPSS programme are as follows.

Table 1. Partial Test Analysis Results (T Test)

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-12638.389	7116.277		-1.776	.119
	EPS	12.465	2.921	.676	4.267	.004
	ROA	-3681.689	1445.750	-1.808	-2.547	.038
	ROE	2917.621	1225.310	1.939	2.381	.049
	DER	36522.348	15362.348	1.889	2.377	.049
a. Dependent Variable: Harga Saham						

Sumber : Lampiran Data Diolah SPSS

Based on the partial test results above, it can be explained as follows:

Partial Test (T Test)

1) Hypothesis Testing 1, namely the effect of Earning Per Share (EPS) on stock price (Y)

From the results of the regression coefficient obtained of 12.465 and tcount of 4.267 with a significant value of 0.004 < 0.05, then H1 is accepted. There is can be concluded that Earning Per Share (EPS) partially has a positive and significant effect on stock prices in cigarette sub-sector companies. There it can be seen that if Earning Per Share (EPS) increases, it will be followed by an increase in the stock price of cigarette companies. These results are in accordance with the theory of Darmadji and Fakhruddin (2011: 156) that Earning per Share (EPS) is a risk that shows the share of profit for each share. EPS illustrates the company's profitability which is reflected in each share. The higher the EPS value, of course, pleases shareholders because the greater the profit available to shareholders and the possibility of increasing the Aamount of dividends received by shareholders. So that this will increase investor interest and the price of shares that are increasingly in demand will increase in price.

2) Hypothesis 2 testing, namely the effect of Retuen On Assets (ROA) on stock prices.

From the results of the regression coefficient obtained of -3681.689 and tcount of -2.547 with a significant value of 0.038 < 0.05 (smaller than expected), then H2 is accepted. There is can be concluded that Return on Assets (ROA) partially has a negative and significant effect on stock prices in cigarette sub-sector companies.

3) Testing Hypothesis 3, namely the effect of Return on Equity (ROE) on stock prices.

From the results of the regression coefficient obtained of 2917.621 and tcount of 2.381 with a significant value of 0.049 < 0.05 (smaller than expected) then H3 is accepted. There is can be concluded that Return on Equity (ROE) partially has a positive and significant effect on stock prices in cigarette sub-sector companies.

The higher the profit, the better the profit for investors. So fore ROE is one of the attractions for an investor to buy shares. The higher the ROE, the higher the company's share price along with the increase in investor interest in the company.

The Effect of Earning Per Share, Return on Assets, Return on Equity, Debt to Equity Ratio on Stock Prices (Study on Cigarette Companies Listed on the Indonesian Stock Exchange for the Period 2015-2017)

The coefficient of determination or R^2 in this study obtained a value of 0.931 or 93.1%. This shows that the four independent variables, namely Earning Per Share (EPS), Return On Assets (ROA), Return On Equity (ROE), Debt To Equity Ratio (DER), affect the stock price variable by 93.1%. While the remaining 6.9% is influenced by other factors besides the factors proposed in this study.

Most Dominant Variable

Return On Equity (ROE) in determining stock prices is the most dominant variable with a standardised Coefficients (B) value of 1.939 compared to other variables, namely Earning Per Share (EPS) with a value of 0.676, Return On Assets with a value of -1.808 and Debt To Equity Ratio (DER) with a value of 1.889. So Return On Equity (ROE) is the most dominant influence on Share Price in cigarette sub-sector companies. Therefore the company must be able to increase its financial ratios, especially Return On Equity (ROE), Return On Assets (ROA) and Earning Per Share (EPS) in order to increase the company's stock price and increase investor interest in investing.

Interpretation

1. Partial Effect of Earning Per Share (X1) on Stock Price (Y).

Based on the results of the data processed to analyse the effect of Earning Per Share (EPS), the tcount is 4.267 with a significant value of 0.004 (level of significant 0.05 or 5%), then H_1 is accepted. So, Earning Per Share (EPS) (X1) has a positive and significant effect on Share Price (Y) in cigarette sub-sector companies on the Indonesia Stock Exchange for the period 2015-2017.

EPS is said to be the most important component in determining stock prices, because dividends are paid from Earning and also because there is a positive relationship between changes in Earning and stock prices, this indicates that if the EPS value of a company increases, the company's stock price will also increase.

2. Partial Effect of Return On Asset (X2) on Stock Price (Y).

Based on the results of the data processed, the analysis of the effect of Return On Asset (ROA) obtained a tcount of -2.547 with a significant value of 0.038 (level of significant 0.05 or 5%), then H_2 is accepted. So, Return On Asset (ROA) (X2) has a negative and significant effect on Share Price (Y) in cigarette sub-sector companies on the Indonesia Stock Exchange for the period 2015-2017.

The regression analysis results show that ROA is one of the factors that negatively and significantly affect stock prices.

3. Partial Effect of Return On Equity (X3) on Stock Price (Y).

Based on the results of the data processed to analyse the effect of Return On Equity (ROE), the tcount is 2.381 with a significant value of 0.049 (level of significance 0.05 or 5%), then H_3 is accepted. So, Return On Equity (ROE) (X3) has a positive and significant effect on Share Price (Y) in cigarette sub-sector companies on the Indonesia Stock Exchange for the period 2015-2017.

ROE ratio information can provide an overview of the extent to which the company's ability to generate profits earned by shareholders on capital, so that if the company's ROE value increases, it will affect the company's value which will cause the market share price to increase as well so as to attract investors to buy shares or to invest in the company.

The higher the profit, the better the profit for investors. Therefore, ROE is one of the attractions for an investor to buy shares. The higher the ROE, the higher the company's share price along with the increase in investor interest in the company.

4. Partial Effect of Debt to Equity Ratio (X4) on Stock Price (Y).

Based on the results of the data processed to analyse the effect of Debt to Equity Ratio (DER), the tcount is 2.377 with a significant value of 0.049 (level of significance 0.05 or 5%), then H_4 is accepted. So, Return Debt to Equity Ratio (DER) (X4) has a positive and significant effect on Share Price (Y) in cigarette sub-sector companies on the Indonesia Stock Exchange for the period 2015-2017.

The regression analysis results show that DER is one of the factors that has a positive and significant effect on stock prices. This is because each investor has a different perception of the debt aspect. According to Sawidji (1996: 81) that the main factor affecting stock prices is the perception of each investor in accordance with the information obtained.

If the company has debt, it will certainly pay interest on the debt, so that the interest paid is able to reduce the tax costs paid by the company so that with the reduced tax costs paid, the performance of companies that use debt will be better than companies that do not use debt. This good performance can provide a good return on investment.

5. Simultaneous Effect between Earning Per Share (X1), Return On Assets (X2), Return On Equity (X3) Debt to Equity Ratio (X4) Variables on Stock Price (Y).

(X4) together have an effect on stock prices. This can be seen from the results of the F and R^2 tests, with an Fcount of 23,454 with a significant value of 0.000 with a probability of error level smaller than the expected significance level (level of significance 0.05

The Effect of Earning Per Share, Return on Assets, Return on Equity, Debt to Equity Ratio on Stock Prices (Study on Cigarette Companies Listed on the Indonesian Stock Exchange for the Period 2015-2017)

or 5%). This shows that Earning Per Share (EPS), Return On Assets (ROA), Return On Equity (ROE), Debt To Equity Ratio (DER) simultaneously have a positive and significant effect on stock prices in cigarette sub-sector companies and H5 is accepted.

Based on the coefficient of determination or R² in this study, a value of 0.931 or 93.1% was obtained. This shows that the four independent variables, namely Earning Per Share (EPS), Return On Assets (ROA), Return On Equity (ROE), Debt To Equity Ratio (DER) affect the stock price variable by 93.1%. While the remaining 6.1% is influenced by other factors besides the factors proposed in this study.

6. Return On Equity (X3) Has the Most Dominant Effect on Stock Price (Y).

Return On Equity (ROE) in determining stock prices is the most dominant variable with a standardised Coefficients (B) value of 1.939 compared to other variables, namely Earning Per Share (EPS) with a value of 0.676, Return On Assets (ROA) with a value of -1.808 and Debt To Equity Ratio (DER) with a value of 1.889.

So Return On Equity (ROE) is the most dominant influence on stock prices in cigarette sub-sector companies listed on the Indonesia Stock Exchange for the period 2015-2017. Therefore the company must be able to increase its financial ratios, especially Return On Equity (ROE) in order to increase the company's share price and increase investor interest in investing.

CONCLUSION

Based on the results of the analysis and discussion that has been described, the following conclusions can be drawn

1. Earning Per Share (EPS) variable partially has a positive and significant effect on stock prices in cigarette sub-sector companies listed on the Indonesia Stock Exchange for the period 2015-2017.

Based on the results of the data processed by the analysis of the effect of Earning Per Share (EPS), the tcount is 4.267 with a significant value of 0.004 (level of significant 0.05 or 5%), then H1 is accepted. So, Earning Per Share (EPS) (X1) has a positive and significant effect on Share Price (Y) in cigarette sub-sector companies on the Indonesia Stock Exchange for the period 2015-2017.

2. Variable Return On Assets (ROA) partially has a negative and significant effect on stock prices in cigarette sub-sector companies listed on the Indonesia Stock Exchange for the period 2015-2017.

Based on the results of the data processed, the analysis of the effect of Return On Assets (ROA) obtained a tcount of -2.547 with a significant value of 0.038 (level of significant 0.05 or 5%), then H2 is accepted. So, Return On Asset (ROA) (X2) has a negative and significant effect on Share Price (Y) in cigarette sub-sector companies on the Indonesia Stock Exchange for the period 2015-2017.

3. Return On Equity (ROE) variable partially has a positive and significant effect on stock prices in cigarette sub-sector companies listed on the Indonesia Stock Exchange for the period 2015-2017.

Based on the results of the data processed by the analysis of the effect of Return On Equity (ROE), the tcount is 2.381 with a significant value of 0.049 (level of significance 0.05 or 5%), then H3 is accepted. So, Return On Equity (ROE) (X3) has a positive and significant effect on Share Price (Y) in cigarette sub-sector companies on the Indonesia Stock Exchange for the period 2015-2017.

4. Debt To Equity Ratio (DER) variable partially has a positive and significant effect on stock prices in cigarette sub-sector companies listed on the Indonesia Stock Exchange for the period 2015-2017.

Based on the results of the data processed by the analysis of the effect of Debt to Equity Ratio (DER), the tcount is 2.377 with a significant value of 0.049 (level of significance 0.05 or 5%), then H4 is accepted. So, Return Debt to Equity Ratio (DER) (X4) has a positive and significant effect on Share Price (Y) in cigarette sub-sector companies on the Indonesia Stock Exchange for the period 2015-2017.

5. Earning Per Share (EPS), Return On Asset (ROA), Return On Equity (ROE), Debt To Equity Ratio (DER) variables simultaneously have a significant effect on stock prices in cigarette sub-sector companies listed on the Indonesia Stock Exchange for the period 2015-2017.

JOINTLY

1. variable Earning Per Share (X1), Return On Assets (X2), Return On Equity (X3) Debt to Equity Ratio (X4) on Stock Price (Y): based on the results of the data processed, the analysis of the effect of Earning Per Share (X1), Return On Assets (X2), Return On Equity (X3) Debt to Equity Ratio (X4) together has an effect on stock prices. This can be seen from the results of the F and R² tests, with an Fcount of 23,454 with a significant value of 0.000 with a probability of error level smaller than the expected level of significance (level of significance).

The Effect of Earning Per Share, Return on Assets, Return on Equity, Debt to Equity Ratio on Stock Prices (Study on Cigarette Companies Listed on the Indonesian Stock Exchange for the Period 2015-2017)

cigarette sector, this study also provides information on how to calculate stock prices using financial ratios, namely profitability and solvency.

2. For Issuers

The company should improve its financial performance and management performance every year so that investors' perceptions of the company's future performance prospects can be maintained properly. The company must further improve the performance of its financial ratios in this case Earning per Share (EPS), Return on Asset (ROA), Return on Equity (ROE), Debt to Equity Ratio (DER) which are proven to significantly affect stock prices. This can be done by opening new subsidiaries or expanding market share, so that investor confidence increases and has a positive impact on stock prices. In addition, it is expected that in the long run profits will also increase, and the EPS, ROA, ROE ratios can also be increased, and ultimately can increase the share price in the market.

3. For Further Researchers

Future researchers can add to the research period and other internal factors that might affect both macro and micro variables, such as Foreign Exchange rates, Gross Domestic Product, Market To Book Value, Total Asset, Price Earning Ratio, Dividend Per Share and Turn Over Ratio. Need to pay attention to external factors that can affect financial statements so that they can add new analyses.

REFERENCES

- 1) Alwi,Z Iskandar.(2013).*pasar Modal Teori dan Aplikasi*. Edisi Pertama. Jakarta : Nasindo Internusa.
- 2) Darmaji, Tjiptono dan Henry M Fakhrudin. (2006). *Pasar Modal di Indonesia: Pendekatan Tanya Jawab*. Jakarta: Salemba Empat.
- 3) Darmadji, Tjiptono dan Hendy M. Fakhruddin. (2011). "Pasar Modal di Indonesia
- 4) Edisi 3". Jakarta : Salemba Empat
- 5) Djarwanto PS., dan Pangestu Subagyo.(2008). *Statistik Induktif* : BPFE.
- 6) Fahmi, Irham, S.E.,M.Si.(2014). *Pengantar Manajemen Keuangan Teori dan Soal Jawab*. Bandung : ALFABETA.
- 7) Halim, Abdul.,dan Sarwoko.(2016). *Manajemen Keuangan*. Edisi 2. Yogyakarta : BPFE.
- 8) Harahap, Sofyan Safitri.(2009). "Analisis Kritis Laporan Keuangan" Jakarta : Raja grafindo Persada
- 9) Kasmir.(2010). *Pengantar Manajemen Keuangan*. Jakarta: Kencana Prenada Media.
- 10) Kasmir,S.E.,M.M. (2012). *Analisis Laporan Keuangan*. Jakarta : PT Raja Grafindo Persada.
- 11) Martono & Harjito, Agus. (2003). *Manajemen Keuangan*. Yogyakarta: Ekonosia.
- 12) Martono. (2009). *Bank & Lembaga Kauangan Lain*.Yogyakarta : Ekonisia.
- 13) Priyanto, Duwi (2012). *Belajar Praktis Analisis Parametrik dan Non Parametrik dengan SPSS*. Yogyakarta: Gava Media.
- 14) Sartono, Agus, R.(2001). *Manajemen Keuangan Teori dan Aplikasi*. Yogyakarta: BPFE.
- 15) Sanusi, Anwar (2011) *Metodologi Penelitian Bisnis*. Jakarta : Salemba Empat
- 16) Sawidji, Widoatmojo, (1996). "Cara Sehat Investasi di Pasar Modal". Jakarta : Jurnalindo Aksan Grafika
- 17) Sugiyono, Dr. (2015). *Metode Penelitian Pendidikan*. Bandung : Alfabeta.
- 18) Tandelilin, Eduardus.(2007). *Analisa Investasi dan Manajemen Portofolio*, Edisi Pertama. Yogyakarta: BPFE.
- 19) Tandelilin,Eduardus.(2010). *Portofolio dan Investasi (Teori dan Aplikasi)*. Yogyakarta: Kanisius.
- 20) Widoatmodjo,Sawidji.(2005). *Cara Sehat Investasi di Pasar Modal*. Jakarta: Jurnalindo Aksara Grafika.



There is an Open Access article, distributed under the term of the Creative Commons Attribution – Non Commercial 4.0 International (CC BY-NC 4.0) (<https://creativecommons.org/licenses/by-nc/4.0/>), which permits remixing, adapting and building upon the work for non-commercial use, provided the original work is properly cited.