Research.

The effect of return on equity, earning per share and price earning ratio on stock prices

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Abstract. *The purpose of this study is to analyze, test, and prove the effect of returns on equity (ROE), earnings per share (EPS), and price-earnings ratio (PER) on stock prices (SP). The method carried out in this test uses multiple linear regression with the preceding test of classical assumption deviations. The result shows that the data is normally distributed and no overlapping is obtained. Based on the results of the ANOVA test calculations obtained the value of F-value = 13.349 with a significance of 0.005. By using the 0.05 level of significance, the value of F-table is 2.839. Then F-value 13.349> F-table (2.389), or significance of 0.005 smaller than 0.05 so that it can be concluded that the three independent variables namely ROE, EPS and PER simultaneously influence the Stock Price on the Indonesia Stock Exchange. Partially the ROE has a significant effect but EPS and PER do not affect.*

Keywords: returns on equity, earnings per share, and price-earnings ratio on stock prices.

Introduction

In the current era of globalization, capital markets have an important role in economic activity, an important role in market economic activities. The capital market is one source of economic progress because it can be a source and alternative for companies besides banks.

According to Fahmi (2012:52), a capital market is a place where various parties, especially companies sell stocks (stocks) and bonds (bonds), with the aim of the sale will be used as additional funds or to strengthen the company's capital.

In Indonesia, the role of the capital market is the Indonesia Stock Exchange (IDX). The development of the IDX was so fast that it became an alternative for companies to seek additional funds. The development of the IDX in addition to the increasing number of members of the exchange can be seen also from changes in the price of shares traded. For investors, the capital market is a place to channel funds in the form of shares, stock investment has an attraction for investors.

According to Suad Husnan and Enny Pudjiatuti (2012:73), Return on equity is a ratio to measure how much profit is the right of the owner of his own capital. Badriwan (2007:443), Earning Per Share is the amount of income earned in a period for each share outstanding, and will be used by the company leader to determine the number of

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dividends to be distributed. Fahmi (2013:138), Price Earning Ratio (market price per share) with earnings per share (earnings per share) against the expected increase in profit growth will also increase. Sartono (2008:70), stock prices are formed through the mechanism of demand and supply in the capital market. If a share experiences an excess demand, then the stock price tends to rise. Conversely, if the excess supply then the stock price tends to fall.

Considering the importance of stock prices, financial ratio analysis, and the increasingly widespread development of manufacturing companies that go public and more and more creditors who have the ability to analyze and process these financial statements become useful information for investment, therefore it is interesting to conduct research on "effect of return on equity, earning per share and price earning ratio on stock prices in sector food and beverage companies registered in The Indonesia Stock Exchange (IDX)".

Literature Review

1. Financial Report

According to financial accounting standards in the scope of financial statements (2015: 1), financial statements are part of the financial reporting process. Complete financial statements include a balance sheet, income statement, statement of changes in financial positions (which can be presented in various ways, for example, cash flow reports, or cash flow reports), notes and other explanatory material integral part of financial statements. In addition, it also includes schedules and additional information related to the report, for example, financial information on industrial and geographical segments as well as the combination of the effects of price changes.

Bambang, W. (2014:11), revealed the purpose of the analysis of financial statements themselves is essentially to help use in estimating the future of the company by comparing, evaluating and analyzing trends from various aspects of the company's finances. Kasmir (2008:104), revealed financial ratios are activities comparing the numbers in the financial statements by dividing one number by another. Comparisons can be made between one component with components in one financial report or between components that exist between financial statements. According to Tandelilin (2010:2), investment is a commitment or a number of funds or other resources carried out at this time, with the aim of obtaining future profits. According to Fahmi (2012:52), the capital market is a place to share parties, especially companies selling stocks (stocks) and bonds (bonds), with the aim of the sale will be used as additional funds or to strengthen the company's capital. According to Husnan, S (2008:29), shares are a piece of paper that shows the rights of investors, namely the party that owns the paper to obtain a part of the prospect or wealth of the organization that issues the securities, and various conditions that enable the investor to exercise his rights.

2. Stock Prices

According to Sartono, (2008:70), stock prices are formed through the mechanism of demand and supply in the capital market. If a share experiences an excess demand, then the stock price tends to rise. Conversely, if the excess supply then the stock price tends to fall. According to Jogiyanto (2008:167), the stock price is the price of a stock that occurs on the stock market at a certain time determined by market participants and determined by the demand and supply of the shares concerned in the capital market.

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3. Retur on equity

Bambang, W. (2014:82) Return On Equity (ROE) is often also called the rentability of own capital. This ratio is used to measure how much profit is the right of the owners of their own capital. The profit that is used is profit after tax. Meanwhile, own capital is calculated on average. The return on equity formula, shown below:

$$ROE \quad = \quad \frac{\text{Earning After Tax}}{\text{Average Own Capital}}$$

4. Earning per share

According to Tandelilin (2010:384), Earning per share is net income that is ready to be shared with shareholders divided by the number of shares of the company. The formula for calculating Earning per Share a company is:

$$EPS \quad = \quad \frac{\text{Earning After Tax}}{\text{Outstanding Stocks}}$$

5. Price earning ratio

According to Brigham and Houston (2010:150) Price Earning Ratio is the ratio of price per share to earnings per share showing the amount that investors are willing to pay for each reported profit dollar. For investors, the higher the price-earnings ratio (PER), the expected earnings growth will also increase. The formula used according to Brigham and Houston is:

$$PER \quad = \quad \frac{\text{Stocks Price}}{\text{Earning per Share}} \quad X \quad 100\%$$

6. Research framework

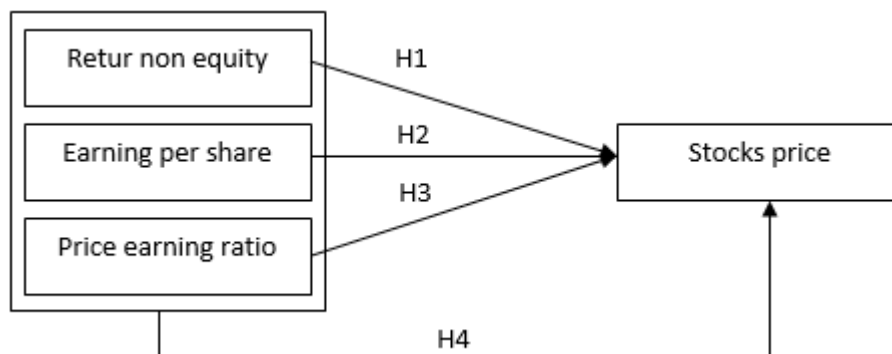The research framework can be described as the figure below:

Figure 1. Research framework

7. Hypothesis

Based on the frame of mind which has been described in the previous section then the hypothesis stated in this study is as follows:

H1: Return on equity influences to stock price.
H2: Earning per share influences to stock price.
H3: Earning price ratio influences to stock price
H4: Retur non equity, earning per share, and earning price ratio influence to stock price.

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Research Method

Sugiyono (2009:6), in this study uses explanatory research with a quantitative approach, because in this study the method used is an explanatory method that is testing hypotheses based on the theories that have been formulated before and then the data that has been obtained is calculated further through a quantitative approach. The population in this study are food and beverage companies that are listed on the Indonesia Stock Exchange (IDX) during the 2014-2016 observation period, which amounted to 14 companies.

The analysis technique used is the Analysis of Multiple Linear Regression. Multiple linear regression analysis is used to test the hypothesis in this study. In multiple linear analysis, besides measuring the strength of the influence of independent variables on the dependent variable, it also shows the direction of influence. Multiple linear regression equation (Ghozali, 2011:96).

$$Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + e$$

Y   = Stock Price
a   = Constant
$b_1 - b_3$ = Multiple regression coefficient
X1   = ROE
X2   = EPS
X3   = PER
e   = error

Results and Discussion

1. Result

   a. Multiple linear regression

      The analysis used in this study uses multiple linear regression analysis. Regression is an analytical tool used to measure how far the influence of the independent variable on the dependent variable. The results of the regression equation were processed using SPSS 20, obtained by the multiple linear regression equation as follows:

Table 1
Results of Multiple Linear Regression

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	223545653,7	3	74515217,89	13,349	,000[b]
	Residual	212120013,5	38	5582105,617		
	Total	435665667,1	41			

a. Dependent Variable: Harga_Saham

b. Predictors: (Constant), PER, ROE, EPS

Source: Secondary data processed

The calculation of multiple linear regression using the SPSS 20 program, the following results are obtained:

$$Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + e$$

$$Y = 1150,128 + 8251,212\ ROE + 0.025\ EPS + 2,210\ PER + e$$

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From the above equation can be explained:

1) In the regression coefficient equation above, the constant (Bo) is equal to 1150,128, this means that if there is no change in the variable ROE, EPS, the PER remains at 1150,128.
2) ROE variable regression coefficient is obtained at 8251,212, this means that if the ROE increases by 1 point, it will raise the share price by 8251,212 or vice versa.
3) EPS variable regression coefficient value obtained at 0.025 this means that every increase in EPS by 1 point will not cause the stock price to rise.
4) Regression coefficient value of PER variable is 2,210, this means that every increase in PER by 1 point will not cause stock prices to rise.

b. Hypothesis testing

1) Test F (simultaneously)

Table 2
Test Results F

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1150,128	567,130		2,028	,050
	ROE	8251,212	1854,819	,680	4,449	,000
	EPS	,025	,076	,050	,329	,744
	PER	2,210	10,752	,023	,206	,838

a. Dependent Variable: Harga_Saham

Source: Secondary data processed

Statistical test results by conducting a simultaneous test, namely Return On Equity (ROE), Earning Per Share (EPS), and Price Earning Ratio (PER), together (simultaneous) to the dependent variable (Stock Price). With the hypothesis proposed as follows:

H_0 = There is no influence Return On Equity, Earning Per Share and Price Earning Ratio, simultaneously to stock price.

H_1 = There is an influence Return On Equity, Earning Per Share and Price Earning Rasio simultaneously to stock price.

The testing criteria for regression significance are if F-value > F-table then H_0 is rejected and H_1 is accepted. From the Annova table obtained F-value of 13,349 where Ftable is 2,839. This means that F-value > F-table (13,349 > 2,839). So the conclusion is that H_0 is rejected and H_1 is accepted, and it can be concluded that there is an influence between Return On Equty (ROE), Earning Per Share (PER) and Price Earning Ratio (PER), simultaneous to stock prices in sector companies Food and Beverage listed on the IDX for the 2014-2016 period.

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2) T test (partially)

Table 3
Test Results t

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1150,128	567,130		2,028	,050
	ROE	8251,212	1854,819	,680	4,449	,000
	EPS	,025	,076	,050	,329	,744
	PER	2,210	10,752	,023	,206	,838

a. Dependent Variable: Harga_Saham

Source: Secondary data processed

The results of statistical testing by doing t test (partially), namely Return On Equity (ROE) partially to the stock price. With the hypothesis proposed as follows:

H_0 = There is no a partial influence Return On Equity to stock price.

H_1 = There is a partial influence Return On Equity to stock prices.

The testing criteria for regression significance are if t count > t table then H_0 is rejected and H_1 is accepted. From the Coefficients table obtained t-value of 4.449 where t table is 1.671. That is, t count > t table (4,449 > 1,671). So the conclusion is that H_0 is rejected and H_1 is accepted, and it can be concluded that there is an influence between the Return on Equity (ROE) partially to the stock price in the Food and Beverage sector companies listed on the Stock Exchange for the period 2014-2016.

The results of statistical testing by performing a t test (partially) are partially Earning Per Share (EPS) against the stock price. With the hypothesis as follows:

H_0 = There is No. a partial influence Earning Per Share on stock prices.

H_1 = There is a partial influence Earning Per Share on stock prices.

The testing criteria for regression significance are if tvalue > t-table then H_0 is rejected and H_1 is accepted. From the Coefficients table obtained t-value of 0.329 where t-table is 1.671. That is, t-value < t-table (0.329 < 1.671). So the conclusions are that H_0 is accepted and H_1 is rejected, the funds can be concluded that there is no influence between Earning Per Share (EPS) partially on the stock price in the Food And Beverage sector company listed on the IDX for the 2014-2016 period.

The results of statistical testing by performing a t-test (partially), namely Price Earning Ration (PER) partially to the stock price. With the hypothesis as follows:

H_0 = There is no a partial influence Price Earning Ratio to stock prices.

H_1 = There is a partial influence Price Earning Ratio to stock prices.

The testing criteria for regression significance are if t-value > t-table then H_0 is rejected and H_1 is accepted. From the Coefficients table

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obtained t-value of 0.206 where t table is 1.671. That is, t-value < t-table (0.206 < 1.671). So the conclusions are that H_0 is accepted and H_1 is rejected, the funds can be concluded that there is no effect between Price Earning Ratio (PER) partially on stock prices in the Food And Beverage sector company listed on the IDX for the 2014-2016 period.

c. Determination Coefficient Test (R^2)

The coefficient of determination (R^2) aims to measure how far the ability of the model in explaining the variation of the dependent variable. The coefficient of determination is zero and one. The small value of R^2 means that the ability of the independent variables to explain the variation of the dependent variable is very limited, can be seen in this table:

Table 4
Determination Coefficient Test Results (R^2)

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,716[a]	,513	,475	2362,64801	1,860

a. Predictors: (Constant), PER, ROE, EPS

b. Dependent Variable: Harga_Saham

Source: Secondary data processed

The results of the study it is known that the analysis of the coefficient of determination used to determine the percentage contribution of the influence of independent variables together on the dependent variable. Percentage of influence of Retun On Equity (ROE), Earning Per Share (EPS) and Price Earning Ratio (PER) variables together with stock prices obtained Adjusted R Square value of 0.475 which indicates that stock prices are influenced by three variables namely ROE, EPS , PER, and influence of 47.5%, the remainder is 52.5% (100% - 47.5%) of stock prices influenced by other variables that have not been studied in this study.

2. **Discussion**

a. Influence Return On Equity, Earning Per Share, and Price Earning Ratio, simultaneously to stock prices.

The results of significance testing obtained F-value of 13,349 where Ftable is 2,839. This means that F-valuet > Ftable (13,349 > 2,839). So the conclusion is that H_0 is rejected and H_1 is accepted, and it can be concluded that there is an influence between Return On Equty (ROE), Earning Per Share (EPS) and Price Earning Ratio (PER), together (simultaneous) to stock prices in sector companies Food and Beverage listed on the IDX for the 2014-2016 period.

Based on the results of this study between Return On Equity (ROE), Earning Per Share (EPS) and Price Earning Ratio (PER), jointly (simultaneously) has an effect on and significant on stock prices in Food And Beverage sector companies listed on the Stock Exchange Indonesia for the 2014-2016 period.

b. Influence Return On Equity to Stock Prices

This research is able to prove that ROE is able to influence future stock prices. The t-count value is 4.449 with a significant level of 0,000. This

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high t-count value indicates that ROE is a good proxy for future stock prices. With this level of significance, it can be concluded that the ROE variable influences future stock prices in the Food And Beverage company.

The results of this study are in accordance with previous studies conducted by Indra Irfrianto (2015) who concluded that the ROE variable had a positive and significant effect on stock prices.

c. Effect of Earning Per Share (EPS) on Stock Prices

EPS obtained t-count 0.329 with a significance value of 0.744 which is greater than the significant level previously set at 0.05. These results indicate EPS does not have a significant effect on dividend policy which is proxied by the stock price.

The results of this study are in accordance with previous studies conducted by Ema Novasari (2013) which concluded that EPS variables have a positive and significant effect on stock prices.

d. Influence Price Earning Ratio to Stock Prices

This research is able to prove that PER is not able to influence the price of future shares. The t-count value is 0.206 with a significance level of 0.838. This low t-count value indicates that PER is a proxy that is not good for future stock prices. With this level of significance, it can be concluded that the PER variable does not affect the stock prices in the future in the Food And Beverage company.

The results of this study are in accordance with previous studies conducted by Ema Novasari (2013) which concluded that the PER variable had a positive and significant effect on stock prices.

Conclusions and Recommendations

1. Conclusion

Based on the results of the discussion of the analysis and through proof of the hypotheses of the issues to be raised regarding the factors that affect the stock price of a Food And Beverage company listed on the Indonesia Stock Exchange (IDX) for the 2014-2016 period described in Chapter IV, it can conclusions from this study are taken as follows:

a. Partially the ROE variable affects the stock price of Food and Beverage companies listed on the Stock Exchange for the 2014-2016 period.
b. Partially EPS variable does not affect stock prices in Food and Beverage companies listed on the Stock Exchange for the 2014-2016 period.
c. Partially, the PER variable does not affect the stock price of Food and Beverage companies listed on the Stock Exchange for the 2014-2016 period.
d. Simulatan has the effect of ROE, EPS and PER on stock prices in Food and Beverage companies listed on the Stock Exchange for the 2014-2016 period.

2. Recommendation

The suggestions that can be given in connection with the research that has been done are as follows:

a. For financial statement users who will take a decision, they should not rely on data on ROE, but also need to pay attention to other factors and other ratios in relation to rising stock prices such as company size, economic factors, the effects of the food and beverage industry, the ratio profitability, solvency ratio, asset ratio and other liquidity ratios.

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b. Food and beverage companies are expected to pay more attention to the company's ability to increase stock prices by making effective and efficient use of costs so as to increase profits, increase debt, regulate usage in terms of expansion, and increase good and efficient working capital.
c. For investors in purchasing shares, a company should be able to read the company's performance from its financial performance which is interpreted in financial ratios so that investors get results that are in accordance with their objectives, which want high dividends.
d. For researchers next to multiply variables or use other variables such as; Retun On Assets, Gross Profit Margin, Devidend Payout Ratio, Price to Book Value Ratio, besides increasing the sample of research so that further research will be more precise and accurate.

References

Rutika, A., Marwoto, B., Panjaitan, F. (2015). Analisis Pengaruh EPS, NPM, ROA, DER Terhadap Harga Saham pada Perusahaan Asuransi yang Terdaftar di BEI Tahun 2011-2013.

Annio, I.LN., Lutfi, M., Syahyunan. (2007). Pengaruh Faktor Fundamental dan Teknikal Terhadap Harga Saham Properti yang Terdaftar di Bursa Efek Jakarta. *Jurnal Ekonomi, Bisnis dan Akuntansi*, 2 (2).

Arikunto, S. (2007). Metode Penelitian. Edisi Ketiga.Yogyakarta: BPFE.

Baridwan, Z. (2007). Intermediate Accounting. Yogyakarta: BPFE.

Brigham., Houston. (2006). Dasar-dasar Manajemen Keuangan. Jakarta: Salemba Empat.

Darmadji., Fakhrudin. (2012). Pasar Modal di Indonesia. Edisi 3. Jakarta: Salemba Empat

Denies, P., Prabandaru, A.K. (2012). Pengaruh Return On Invesment (ROI), Earning Per Share (EPS), dan Deviden Per Share (DPS) Terhadap Harga Saham Perusahaan Pertambangan yang terdaftar di Bursa Efek Indonesia (BEI) Periode 2008-2010. *Jurnal Nominal,* 1 (1).

Eduardus, T. (2010). Portofolio dan Investasi – Teori dan Aplikasi. Yogyakarta: Kanisius.

Fahmi, I. (2012). Manajemen Investasi: Teori dan Soal Jawban. Jakarta: Salemba.

Feri, C.F. (2014). Pengaruh ROE, ROA, NPM Terhadap Harga Saham pada Sektor Real Eastate and Property di BEI Periode Tahun 2008-2011. *Jurnal Bisnis dan Ekonomi*, 5(1).

Hangga P.M. (2017). Pengaruh CR, DER, ROA dan EPS Terhadap Harga Saham Food and Beverage.

Harahap, S. S. (2007). Analisa Kritis Atas Laporan Keuangan. Jakarta: Penerbit Raja Grafindo.

Husnan, S., Enny, P.(2012). Dasar-dasar Manajemen Keuangan. Yogyakarta. UPP AMP YKPN.

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Irfrianto, I. (2015). *ISSN 2355-5406, ejournal.adbisnis.fisip-unmul.ac.id. Pengaruh PER, NET, NPM dan ROE Terhadap Harga Saham Perusahaan Sub Sektor Telekomunikasi Pada BEI.*

Indriastanti, S.R., Kusumawati, E. (2010). Manajemen Keuangan I. Fakultas Ekonomi, Universitas Muhammadiyah Surakarta.

Jogiyanto, (2010). Teori Portofolio dan Analisis Investasi. Edisi ketujuh. Yogyakarta: BPFE UGM.

Kasmir. (2008). Analisis Laporan Keuangan . PT Rajagrafindo Persada. Jakarta.

--------. (2012). Analisa Laporan Keuangan. PT. Raja Grafindo Persada. Jakarta.

Reynard, V.L.S.(2013). Pengaruh ROA, CR, ROE, DER dan EPS Terhadap Harga Saham Perusahaan Manufaktur Sektor Industri Barnag Konsumsi Di BEI.

Rosdian, W.W., Ventje, I. (2016). Analisis Faktor Fundamental dan Resiko Sistematik Terhadap Harga Saham pada Perusahaan Makanan dan Minuman di BEI Periode Tahun 2011-2015.

Sartono, R.A.(2008). Manajemen Keuangan (Teori dan Aplikasi). Yogyakarta: BPFE.

Sugiyono, (2009). Metode Penelitian Bisnis. Alfabeta. Bandung.

Sunariyah, (2010). Pengantar Pengetahuan Pasar Modal. Yogyakarta: Penerbit UPP STIM YKPN.

Tami, A.W. (2013). Analisis Faktor Fundamental dan Resiko Sistematik Terhadap Harga Saham pada Perusahaan Makanan dan Minuman di BEI Periode Tahun 2009-2011. *Jurnal Ilmu dan Riset*, 2(11).

Yulia, S.S. (2016). Pengaruh Profitabilitas Ratio dan Current Ratio Terhadap Harga Saham pada Perusahaan Farmasi di BEI Periode Tahun 2012-2014. *Jurnal Ilmu dan Riset Manajemen*, 5(6).

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