

Analysis of the Influence of DER and Sales Growth on Stock Prices in Food and Beverage Sub-Sector Companies Registered PT for the 2013-2017 Period

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Abstract: The research was conducted with the aim of analyzing ang know whether the Debt To Equity Ratio and sales growth have a simultaneous effect on stock prices as well as the effect of the variable Debt To Equity Ratio and partial sales growth on stock prices in the food and beverage sub-seector companies registered with PT Bursa Efek Indonesia 2013-2017. The research method uses quantitative secondary methods. This population in this study is a food and beverage sub-sector company registered with PT. Indonesia Stock Exchange 2013-2017 as many as 25 companies. The sample of this study used purposive sampling technique. The number of samples that meet the criteria for the number of 5 companies. The variables used in this study are Debt To Equity Ratio (DER), sales growth as the independent variable and stock price as the dependent variable. The analysis technique used is the classic assumption test, which includes normality test, multicollinearity test, autocorrelation test and heteroscedasticity test. Multiple regression analysis, hypothesis testing and coefficient of determination. The results of the T test show partially the variable debt to equity ratio has a significant effect on stock prices, while sales growth does not effect stock prices. The results of the F test show simultaneously the debt to equity ratio and stock price growth does not significantly influence stock prices. And the result of the study of the coefficient of determination shows from the adjusted R-Square value of 0.209%.

Keywords: Debt To Equity Ratio, Sales Growth, Stock Price

INTRODUCTION

In Indonesia, food and beverage companies are growing rapidly, this can be seen from the number of companies listed on PT. Indonesia Stock Exchange. It is possible that this company was needed by the community because of its profitable prospects both now and in the future. The reason for choosing this sub-sector is because the company's shares are the most resistant to economic crises compared to other sectors because this product is a basic need for people throughout Indonesia. The capital market plays an important role in the economy, because the capital market carries out two functions, namely as a means for companies to obtain fresh funds from the capital market, and also as a means for investors to invest by investing in stocks and bonds.

Definition of capital market according to Fahmi (2015:48): "capital market is a place where various parties, especially companies, sell stocks and bonds with the aim that the proceeds from the sale will later be used as additional funds or to strengthen the company's capital". Benefits of capital market According to (Hadi, 2013:14) as a forum organized based on law to bring together investors as parties with surplus funds to invest in long-term financial instruments, capital market has benefits including:

- 1. Providing long-term financing sources for the business world while enabling optimal allocation of funding sources.
- 2. Alternative investments that provide potential profits with calculated risks through transparency, liquidity and investment diversification.
- 3. Providing the opportunity to have a healthy company with prospects, openness and professionalism, creating a healthy business climate.
- 4. Creating jobs
- 5. Provide access to social control

The main function of the capital market is as a means of forming capital and accumulating funds for financing companies or issuers (government agencies). As in general, the capital market is carried out by various institutions, including securities trading or called PT. Indonesia Stock Exchange. The growth of a company's sales is often used as a benchmark in assessing the development of a company, the growth indicates the increasing size and activity of the company in the long term. The capital structure owned by the company describes the debt to equity ratio, this description concerns the level of risk of a debt in the company. Investors tend to avoid stocks that have a high debt to equity ratio (der). Because if there is an increase in debt to the company, the greater the level of risk owned by the company.

Financial statements

The unity of the accounting information system that goes through the process of classification, recording, summarizing will produce financial reports. The financial reports that have been prepared reflect the condition of a company. According to Hans Kartikahadi, et al. (2016:12) Financial reports are the main media for an entity to communicate financial information by management to stakeholders such as shareholders, creditors, unions, government agencies, management. According to PSAK 1 (2015:13) Financial reports are a structured presentation of the financial position and financial performance of an entity. From this definition, it can be concluded that financial reports are the final result of the accounting process in the form of a medium for communicating the company's financial performance and position which includes profit and loss reports, financial position reports, cash flow reports, capital change reports, and notes on financial reports to interested parties or users of financial reports.

Share

Stocks are one of the most popular capital market instruments for investors because they are able to provide attractive returns. Azis, Mintarti and Nadir (2015:76) Stocks can be defined as a sign of participation or ownership of individual investors or institutional investors or traders for their investments or a number of funds invested in a company.

Stock price

Stock price is the closing price of the stock market during the observation period for each type of stock sampled and its movement is always observed by investors. One of the basic concepts in financial management is that the goal of financial management is to maximize the value of the company. For companies that have gone public, this goal can be achieved by maximizing the market value of the stock price in question. Thus, decision making is always based on considerations regarding the maximization of shareholder wealth. In an efficient capital market, all securities are traded at market prices. The market price of a stock is the price determined by investors through the meeting of supply and demand. Because stocks are traded on the capital market, a valuation system is needed as a benchmark for the good or bad of the stock with the stock market. Darmadji and Fakhruddin (2012:102) Stock price is the price that occurs on the stock exchange at a certain time. Stock prices can change up or down in a very fast time. It can change in minutes or even seconds. This is possible because it depends on the demand and supply between stock buyers and stock sellers.

Financial Ratios

Financial ratios are analytical tools to explain the relationship between one element and another in a financial statement. The financial statements in question are the balance sheet and the income statement. The balance sheet describes the position of assets, liabilities, and equity owned by the company at a certain time. The income statement reflects the results achieved by the company during a certain period. According to Kasmir (2015:104) financial ratios are activities to compare the numbers in the financial statements by dividing one number by another. Comparisons can be made between one component and another in one financial statement between components in the financial statements.

Sales Growth

Sales growth can reflect the success of past investment periods and can be used as a prediction of future growth. Sales growth is also an indicator of demand and competitiveness of a company in an industry. The growth rate of a company will affect the ability to maintain profits in funding future opportunities (Barton, in Detiana, 2013). The growth rate based on financial capacity can be divided into two, namely the growth rate on its own strength (internal growth rate) and the sustainable growth rate. Internal growth rate is the maximum growth rate that a company can achieve without requiring external funds or a growth rate that is only triggered by additional retained earnings. Sustainable growth rate is the maximum growth rate that a company can achieve without financing capital, but by maintaining the ratio between debt and capital. The sales growth rate shows the rate of change in sales from year to year. The higher the growth rate, the more a company will rely on external capital markets. According to Brigham and Houston (in Mahapsari and Taman, 2013), a company with relatively stable sales will be safe in taking on more debt and bearing higher fixed costs than a company with unstable sales.

Company Growth

Meanwhile, Murni and Adriana (2007) stated that the company growth approach is a component to assess the company's prospects in the future. It can be concluded that company growth is a component to assess the company's prospects in the future and is measured based on changes in the company's total sales.

ModelTheoretical

This study focuses on the Analysis of the Effect of DER and Sales Growth on Stock Prices. Effective DER is expected to increase sales growth, which ultimately has an impact on stock prices. This model is in line with the findings of Sutrisno (2021) who highlighted the synergy of these variables in growing a productive organization. By integrating these factors, this model provides a framework in which food and beverage sub-sector companies.

Framework of Thinking



Research Hypothesis

- Ho: There is no influence of debt to equity ratio on stock prices in food and beverage companies listed on the Indonesia Stock Exchange (IDX) for the period 2013-2017.
- Ha: There is an influence of debt to equity ratio on stock prices in food and beverage companies listed on the Indonesia Stock Exchange (IDX) for the period 2013-2017.
- Ho: There is no influence of sales growth on stock prices in food and beverage companies listed on the Indonesia Stock Exchange (IDX) for the period 2013-2017.
- Ha: There is an influence of sales growth on stock prices in food and beverage companies listed on the Indonesia Stock Exchange (IDX) for the period 2013-2017.

METHOD

Research Design

This study adopts a quantitative research design, which focuses on numerical data and statistical measurements to test the proposed hypothesis. Quantitative methods, as explained by Sujarweni (2015), are very useful for examining causal relationships by collecting measurable data and using statistical tools. The quantitative approach is ideal for assessing Analysis of the Influence of DER and Sales Growth on Stock Prices in Food and Beverage Sub-Sector Companies, because these variables can be measured and analyzed quantitatively.

Research Location

This research was conducted in the food and beverage sub-sector registered with PT. Indonesia Stock Exchange (BEI). To obtain the necessary data according to the object being studied, the researcher conducted the research according to the required data.

Research Population

The population used in this study is the goods and consumer industry companies listed on the IDX with reference to the food and beverage sub-sector. This study uses the 2013-2017 research period. The population is 25 companies and not all of this population will be the object of research, so sampling is needed.

Sampling Techniques

Purposive sampling technique was used to select samples from the population. Purposive sampling is appropriate when certain criteria must be met by the participants. In this study, the main criterion was the involvement of respondents in financial administration tasks. The final sample consisted of 25 companies, which was considered adequate for statistical analysis.

Method of collecting data

Primary data were collected through a structured questionnaire distributed to respondents. The questionnaire was designed to measure DER and Sales Growth to Stock Price using a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The use of a structured questionnaire ensures consistency in providing answers, thus facilitating reliable data analysis.

Instrument Validity Test

The validity of the research instrument was tested to ensure that the instrument accurately measures the intended variables. Pearson correlation analysis was used to assess the validity of each item. As stated by Solihin and Ratmono (2020), an item is considered valid if its correlation coefficient is significant at the 5% level (p < 0.05).

Instrument Reliability Test

Reliability is tested using Cronbach's Alpha and Composite Reliability. According to Sholihin and Ratmono (2013), a variable is considered reliable if Cronbach's Alpha and Composite Reliability exceed 0.70. High reliability indicates that the instrument consistently measures the variable on different items and respondents.

Data Analysis Methods

Data analysis was conducted using SPSS version 25, a statistical software widely used for quantitative research. The analysis involved several steps, including validity and reliability tests, classical assumption tests, coefficient of determination, and hypothesis tests.

Classical Assumption Test

Classical assumption tests are essential to ensure that the data meets the requirements for regression analysis. These tests include normality, multicollinearity, heteroscedasticity, and autocorrelation. Ensuring that the data meets these assumptions will increase the robustness and validity of the regression model.

Normality Test

The normality test is conducted to determine whether the data follows a normal distribution. As explained by Widardjono (2013), data is considered normally distributed if the Skewness and Kurtosis Critical Ratio (CR) values are in the range of -2.58 to 2.58 at a significance level of 5%.

Multicollinearity Test

Multicollinearity is tested using the Variance Inflation Factor (VIF). According to Ghozali (2018), multicollinearity does not exist if the VIF value is less than or equal to 5. Multicollinearity can distort the regression coefficients, so its absence ensures a more accurate estimate of the relationship between variables.

Coefficient of Determination (**R**²)

The coefficient of determination (R^2) is calculated to assess the explanatory power of the independent variables. An R^2 value close to 1 indicates that most of the variance of the dependent variable (Stock Price) can be explained by DER and Sales Growth to Stock Price.

Hypothesis Testing

The hypothesis is tested using the t-test at a significance level of 5%. The hypothesis is accepted if the t-statistic value is greater than 1.96, which ensures that the findings are

statistically significant. The t-test provides insight into whether each independent variable significantly affects the stock price.

Regression Model

This study uses a multiple linear regression model to test the relationship between leadership, work discipline, motivation, and performance. The model is stated as: Y = b1X1+b2X2

Where:

- 1. X1 represents DER
- 2. X2 represents Sales Growth
- 3. Y represents Stock Price
- 4. b1, b2, are the regression coefficients.

Interpretation of Regression Coefficients

The regression coefficient (b1, b2,) shows the magnitude and direction of the influence of each independent variable on stock prices. A positive coefficient indicates a unidirectional relationship, while a negative coefficient indicates an opposite relationship.

RESULTS AND DISCUSSION

Validity and Reliability Test Results Normality Test Results

The distribution of points from the Normal P_P Plot image above is relatively close to a straight line, so it can be concluded that the residual data is normally distributed.



Multicollinearity Test Results

The VIF value for both variables is 1.014, while the Tolerance is 0.986. Because the VIF of both variables is not greater than 10 or 5, it can be said that there is no multicollinearity in the two independent variables.

			Coefficientsa				
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	В	Std. Error	Beta			Tolerance	VIF
(Constant)	1020,965	3444,362		,296	,770		
From	9071,760	3830,494	,452	2,368	,027	,986	1,014
Growth	-1022,485	1436,126	-,136	-,712	,484	,986	1,014

Heteroscedasticity Test

Heteroscedasticity testing is done by creating a scatterplot between the residual and the predicted value of the standardized dependent variable. The results of the heteroscedasticity test can be seen in the scatterplot image.



Multicollinearity Test Results

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Multiple Linearity Test Results

Every DER increase of 1 unit, the stock price will increase by 9071.760 units assuming other variables are considered constant. Every 1 unit increase in Growth, the stock price will decrease by 1022.485 units assuming other variables are considered constant.

		Unstandardized Coefficients		Standardi zed Coefficien ts			Collinear Statistic	rity cs
Model		В	Std. Error	Beta	Т	Sig.	Tolerance	VIF
1	(Constant)	1020,965	3444,362		,296	,770		
	From	9071,760	3830,494	,452	2,368	,027	,986	1,014
	Growth	-1022,485	1436,126	-,136	-,712	,484	,986	1,014

Y= 1020,965 + 9071,760 + -1022,485 + €

t-Test Results

The calculated t-prob. value of the independent variable DER is 0.027 which is smaller than 0.05 so that the independent variable DER has a significant effect on the dependent variable HRGSHM at alpha 5%. The same as the effect of the independent variable GROWTH on the dependent variable HRGSHM, because the calculated t-prob. value is 0.484

		Unstandardized Coefficients		Standardize d Coefficients			Collinea Statist	arity ics
	model	В	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	1020,965	3444,362		,296	,770		
	From	9071,760	3830,494	,452	2,368	,027	,986	1,014
	Growth	-1022,485	1436,126	-,136	-,712	,484	,986	1,014

which is greater than 0.05 so that it can be said that the independent variable GROWTH does not have a significant effect on the dependent variable HRGSHM at alpha 5%.

F Test Results

The calculated F probability value is 0.076, which is greater than the significance level of 0.05, so it can be concluded that the estimated linear regression model is not suitable for use.

Mod	el	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	287780947,407	2	143890473,704	2,901	,076b
	Residual	1091376508,593	22	49608023,118		
	Total	1379157456,000	24			

R Square Result

R-Square which is 0.209 indicates that the proportion of the influence of the DER and GROWTH variables on the HRG SHM variable is 20.9%. This means that the dependent variable (HRG SHM) is explained by the independent variables (DER, Growth) by 20.9% while the remaining 79.1% is explained by other factors outside the regression model analyzed.

Model Summaryb							
			Adjusted R	Std. Error of the			
Model	R	R Square	Square	Estimate	Durbin-Watson		
1	,457a	,209	,137	7043.29632	1,174		

M. J.I.C......

1. The effect of debt to equity ratio on stock prices.

Based on the partial test results, the debt to equity ratio has a decision-making rule sig 0.027 < 0.05, so the study shows that the debt to equity ratio has a significant effect on stock prices.

The effect of sales growth on stock prices. 2.

Based on the results of the partial test, sales growth has a decision-making rule sig 0.484 > 0.05, so the study shows that sales growth does not have a significant effect on stock prices.

The effect of debt to equity ratio and sales growth on stock prices. 3.

Based on the results of simultaneous testing, a significance level of 0.076 > 0.05 was obtained, so the debt to equity ratio and sales growth together did not have a significant effect on stock prices.

CONCLUSION

*Debt to equity ratio*partially has a significant effect on the price of food and beverage stocks listed on the Indonesian Stock Exchange for the period 2013-2017. Partial sales growth has no significant effect on the stock prices of food and beverages listed on the Indonesia Stock Exchange for the period 2013-2017. *Debt to equity ratio* simultaneous sales growth did not have a significant effect on the stock prices of food and beverages listed on the Indonesia Stock Exchange for the period 2013-2017. *Debt to equity ratio* simultaneous sales growth did not have a significant effect on the stock prices of food and beverages listed on the Indonesia Stock Exchange for the period 2013-2017.

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