The Effect of Per and Roi on Stock Price in Cement Company (PT X, Cikarang)

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Abstract

The purpose of analyzing financial statements is to provide information for users of financial statements in order to predict, compare and evaluate the company's ability to generate profits. The data used are in the form of secondary data obtained from records from PT X which is a cement producer in Indonesia, and time series data used is data in 2001 - 2018. The variables observed by the author are PER (X1), ROI (X2) and stock prices (Y). The study concluded that and there is a significant influence between the price earning ratio (PER) and return on investment (ROI) together against the stock price.

Keywords: Price Earning Ratio (PER); Return on Investment (ROI); Stock Prices; Cikarang

Introduction

The property sector is one sector that is very potential to be developed, especially in the buffer zone of Jakarta. Cikarang is one of the areas in Bekasi, an area that is in direct contact with Jakarta. The high demand for housing in Bekasi creates its own opportunities for the development of the property sector, especially in Bekasi. Along with the development of the national economy, the property industry in general also experienced a direct increase. Increased activity in the property industry can be used as a guide to start improving or reviving economic activity (Wuryandari et al, 2005).

The demand for property raises many business opportunities which are supply chains from housing providers, one of which is a company that provides cement. From the increased growth of the construction sector and the demand for cement in the country, then in terms of cement consumption in Indonesia there has also been an increase from year to year (Nugroho and Susilo, 2017).

In Indonesia, there are many cement products from premium to valuable, which are quite economical. The cement industry in Indonesia has experienced a shift from tight oligopoly to monopsony over the past 5 years. Opportunities for growth in cement consumption per capita in Indonesia have been responded by industry players with investments in increasing production capacity accompanied by an increasing number of cement players in Indonesia. However, high supply due to increased capacity has not been matched by demand figures, so competition in the cement industry in Indonesia is getting tougher (Suparwati and Widyaningsih, 2016).

The rapid development of the capital market can create various investment opportunities for investors. Currently investors are required to have a number of information relating to stock prices. This information will be used by investors in making decisions regarding company stock investments. In the stock exchange, investors can find out various information about the condition and performance of a company. The condition of the company can be known by the financial statement data, while the financial performance of a company can be assessed by analyzing the company's financial statements using profitability ratios. The purpose of analyzing financial statements is to provide information for users of financial statements in order to predict, compare and evaluate the company's ability to generate profits.

Methodology

In this study the authors did not use samples, because the object of study was only from one company and the data used were secondary data obtained from records from PT X which is a cement producer in Indonesia, and the time series data used were data in 2001 - 2018. Variable Operational Definitions are definitions of variables that are scrutinized to facilitate measurement. In this case, the observed variable is price, product, and promotion of increased sales volume achieved by the company. The variables observed by the author are PER (X1), ROI (X2) and stock price (Y)

Stock

According Jogiyanto (2000), stock prices are: "Stock prices that occur in the stock market at a certain time determined by market participants and determined by the demand and supply of the relevant shares in the capital market". And according to Sartono (2001), the stock market price is formed through the mechanism of demand and supply in the capital market. From some of the definitions above, it can be concluded that the stock price is the selling price per share traded to investors in the capital market.

Return on Investment (ROI)

Return on investment or return on investment, that in some other references this ratio is also written with return on total assets (ROA). This ROA sees the extent to which investments that have been invested are able to provide a return on profits as expected. The investment is actually the same as the company's assets that are invested or placed (Fahmi, 2012).

Price Earning Ratio (PER)

For investors, the higher the price to earnings ratio (price earning ratio), the expected profit growth will also increase. That way, the price earning ratio (ratio of price to earnings) is the ratio between the market price per share (market price per share) with earnings per share (earnings per share).

Result and Disscusion

This method is used to determine the form of a comprehensive relationship about the relationship between PER and ROI variables on stock prices at PT X. The multiple linear regression model is used to explain the associative relationship of the independent variables to the dependent variable by making multiple linear equations namely:

Y = a + b1X1+ b2X2 + e
Y = Stock price
X1 = PER
X2 = ROI
a = constant
e = Interference Error

Table 1 Tabulation of PER, ROI and PT X stock prices

Tahun	Harga Saham (Rp)	PER (%)	ROI (%)
2001	8300	4.90	6.47
2002	7500	3.28	3.14
2003	8950	5.05	5.00
2004	8250	4.00	4.75
2005	9000	5.97	6.23
2006	8750	4.24	6.03
2007	10000	8.00	8.75
2008	8200	7.45	7.72
2009	8300	7.47	8.00
2010	10900	12.68	10.40
2011	12800	14.45	12.42
2012	9450	10.50	8.62
2013	13000	17.24	12.07
2014	8000	15.56	5.83
2015	6500	10.85	5.20
2016	9000	16.56	8.53
2017	7600	13.24	7.37
2018	10200	16.98	9.38

Sources, data processed, 2019

By using the SPSS data processing program, the following output is obtained (Table 2).

Table 2 Results of multiple linear regression analysis

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4662.491	668.382		6.976	.000
	PER (X1)	-74.482	59.161	-.214	-1.259	.227
	ROI (X2)	692.107	116.049	1.012	5.964	.000

a. Dependent Variable: Harga Saham (Y)

The regression equation is as follows:

Y '= a + b1X1 + b2X2
Y '= 4662,491 + (-74,482) X1 + 692,107X2
Y '= 4662,491 - 74,482X1 + 692,107X2

Information:

Y '= Predicted stock price (Rp)
a = constant
b1, b2 = regression coefficient
X1 = PER (%)
X2 = ROI (%)

The predicted value of the stock price (Y ') can be seen in the Casewise Diagnostics table (column Predicted Value). Whereas residual (unstandardized residual) is the difference between the stock price and Predicted Value, and Std. Residual (standardized residual) is a standardized residual value (the value is getting closer to 0, the better the regression model is in making predictions, conversely the more away from 0 or more than 1 or -1, the less good the regression model in making predictions.

Based on the Table 2 also shows the value of t arithmetic which shows the partial relationship of the independent variable to the dependent variable. because the value of -t count> -t table (-1,259> -2,131) then Ho is accepted, meaning that partially there is no significant influence between PER with stock prices. So from this case it can be concluded that partially PER has no effect on the stock price at PT X. And for the value of ROI, the value of t arithmetic> t table (5.964> 2.131) then Ho is rejected, meaning that partially there is a significant influence between ROI and stock price. So from this case it can be concluded that partially ROI has a positive effect on stock prices at PT X.

Table 3 Results of multiple correlation analysis

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.879ᵃ	.772	.742	870.80

a. Predictors: (Constant), ROI (X2), PER (X1)

Based on the Table 3, an R figure of 0.879 is obtained. This shows that there is a very strong relationship between PER and ROI on stock prices and the table above obtained adj R2 (R Square) of 0.742 or (74.2%). This shows that the percentage contribution of the influence of the independent variable (PER and ROI) on the dependent variable (stock price) was 74.2%. Or the variation of the independent variables used in the model (PER and ROI) can explain 74.2% of the variation of the dependent variable (stock price). While the remaining 25.8% is influenced or explained by other variables not included in this research model.

The Standard Error of the Estimate is a measure of the number of errors of the regression model in predicting the value of Y. From the regression results it can be 870.80 or Rp.870.80 (unit price of stock), this means that the number of errors in the prediction of stock prices is Rp. 870.80. As a guideline if the Standard error of the estimate is less than the standard deviation of Y, then the regression model is better at predicting the value of Y.

Table 4 Test results F

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	38620594	2	19310297.00	25.465	.000[a]
	Residual	11374406	15	758293.733		
	Total	49995000	17			

a. Predictors: (Constant), ROI (X2), PER (X1)

b. Dependent Variable: Harga Saham (Y)

Because F arithmetic> F table (25.465> 3.683), then Ho is rejected, meaning that there is a significant influence between the price earning ratio (PER) and return on investment (ROI) together against the stock price. So from this case it can be concluded that PER and ROI together affect the stock price at PT X.

Conclusion

The regression equation above can be explained that constants equal to 4662,491; meaning that if PER (X1) and ROI (X2) value is 0, then the share price (Y ') value is Rp.4662,491. The variable regression coefficient PER (X1) of -74.482; this means that if the other independent variable has a fixed value and PER has increased 1%, then the share price (Y ') will decrease by Rp.74,482. Negative coefficient means that there is a negative relationship between PER and the stock price, the higher the PER, the lower the stock price. ROI variable regression coefficient (X2) of 692,107; This means that if other independent variables have a fixed value and ROI has increased 1%, then the share price (Y ') will increase by Rp.692,107. Positive coefficient means that there is a positive relationship between ROI and stock prices, the higher the ROI, the more stock prices increase. And there is a significant influence between the price earning ratio (PER) and return on investment (ROI) together against the stock price

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