International Journal of Science and Research (IJSR), India Online ISSN: 2319-7064

Effect of Return on Assets (ROA) Against Tobin's Q: Studies in Food and Beverage Company in Indonesia Stock Exchange Years 2007-2011

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Abstract: ***This study aimed to determine the effect of Return On Assets (ROA) to Tobin's Q, populations to be studied in this research is a food and beverage are included in the Indonesia Stock Exchange (BEI) in 2007-2011, the time horizon of five years of research by sampling technique in this study was purposive sampling method, the method of analysis used descriptive statistics and simple linear regression analysis. The results of the study, the magnitude of the effect on Tobin's Q ROA of 14.6% and ROA outside factors that affect Tobin's Q of 85.4%, Return on Assets (ROA) significant effect on Tobin's Q.***

Keywords: Return on Assets (ROA), Tobin's Q

1. Introduction

The impact of the global financial crisis is real and now feels sells shares in Indonesia Stock Exchange by foreign investors because they need the money in their respective countries, the rupiah dropped JCI proceeds buy the dollar, which resulted in the fall of the rupiah, the price shares in various types of companies also declined, the price of food and beverage shares also declined significantly because of it, but in reality would not be recognized by the government, so the government chose to limit its movement in the stock Exchange by way of reining stock such a way that practically eliminated Exchange functions [14].

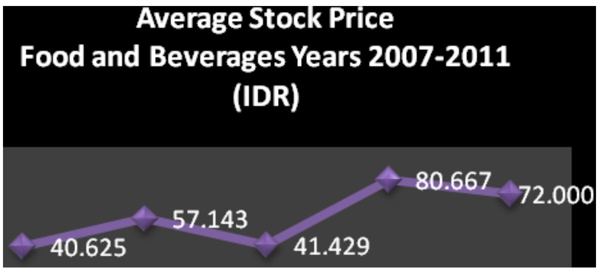


Figure 1: Average Stock Price Food and Beverages Years 2007-2008

Price of food and Beverage Company's stock fluctuates each year, the stock price volatility is very difficult for investors to make an investment, and therefore not arbitrary investors investing in the funds held. Stock price as a representation of the value of the company is not only determined by internal factors, but also by external factors of the company. Internal factors and external factors, the company is a fundamental factor that is often used as a base by the investors in the capital market for investment decisions, so that the fundamental factors include macro fundamental factors (external) and micro fundamentals (internal). In addition to the fundamentals, the technical factors are also an important factor that could affect the stock price. This factor is more technical and psychological such as stock trading volume, trading value of the shares, and the tendency of stock price fluctuations.

Fundamental factor in the analysis of micro capital market is often referred to as the company's fundamentals; these are controllable factors that can be controlled company. Micro fundamentals factors can be grouped into company policy and company performance factor [8]. Performance factors focused on the financial aspects of performance are proxied by ROA. The approach can be used to measure the financial performance of companies such as ROA (return on assets), ROE (return on equity), NPM (net profit margin), EVA (economic value added) and so on. This study uses ROA as an indicator of corporate performance, because previous studies showed that ROA may represent the interests of stakeholders and better performance measures, such as the research conducted by Akroman (2009), Saut and Widyo (2009).

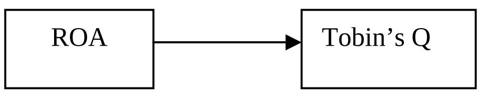
2. Literature Survey

Return on Assets (ROA), a measures the overall effectiveness of management in generating returns to ordinary shareholders with its available assets [7]. Return on assets (ROA) is positive indicates that of the total assets used to operate to provide profit to the company. Conversely, when a negative return on assets indicates that the use of total assets, the company suffered a loss. So that if a company has a high ROA are positive then the company has a great opportunity to enhance the growth of their own capital. But conversely, if the total assets used by the company are not making a profit it will inhibit the growth of their own capital.

Value companies are certain conditions that have been achieved by a company as an overview of public confidence in the company after going through a process of activities over the past few years, ie since the company was founded until now. People consider being willing to buy company stock at a certain price in accordance with the perceptions and beliefs. The increased value of the company is an achievement, in accordance with the wishes of the owners, due to the rising value of the company, the welfare of the owners will also increase, and this is the job of the manager as an agent who has been entrusted by the owners of the company to run the company. Measuring the value of a company can be done by looking at the stock prices on the secondary market, if the stock price raises mean value of the company increases, because the real value of the company is the market value of the stock plus the market value of bonds or long-term debt. The increase in stock prices shows confidence in the company either, so they are willing to pay a higher rate, which is in line with their expectations for high returns as well [8].

One alternative used in assessing the value of the firm is to use Tobin's Q. This ratio was developed by Professor James Tobin (1967). This ratio is a valuable concept because it shows the current estimates of the financial markets on the value of the return on each dollar of incremental investment. If the ratio q above one, indicating that investment in assets generates earnings which provide a higher value than investment spending, this will stimulate new investment. If the ratio is below one-q, investment in assets is not attractive. So the q-ratio is a more accurate measure of how effective use of management resources in economic power. Research conducted by Copeland (2002), Lindenberg and Ross (1981), quoted by Darmawati [2], shows how the q-ratio can be applied to their respective companies. They found that few companies can sustain q ratio greater than one. Economic theory says that the ratio of the larger-q greater than one will draw current resources and new competition until the q-ratio close to one. Often it is difficult to determine whether a high q ratio reflects management superiority or advantage of its patents.

Framework



Research Hypothesis
ROA effect on Tobin's Q

3. Previous Work

Dodd and Chen (1996), ROA significantly correlated to Return Shares. ROA as a measure of corporate performance is better than EVA. Jogiyanto, and Chendrawati, (1999). ROA significant effect Stock Return. ROA as a measure of corporate performance affects In Stock Return is better than the EVA. Similarly, Uchida (2006), found that the ROA has positive and significant impact on Tobin's Q. But the Imam and Irwansyah (2002), found that the ROA had no significant effect on stock return. In accordance with the concept of signaling theory [5], ROA can be used as signal information regarding future cash flows. Therefore, the ROA will be significant positive effect on stock returns or firm value. Research conducted by Ulupui (2007) found results that ROA significant positive effect on stock returns one period ahead. Therefore, ROA is one of the factors that affect firm value. Makaryawati (2002), Carlson and Bathala (1997) also found that ROA positive effect on firm value. However, the different results obtained by Suranta and Pratana (2004) and Kaaro (2002) in Suranta and Pratana (2004) in his research found that ROA actually negatively affect the value of the company.

4. Method

Population to be studied in this research is a food and beverage are included in the Indonesia Stock Exchange (BEI) in 2007-2011, the time horizon of five years of research by the sampling technique in this study was purposive sampling method, using the following criteria : (1) companies that have listed on the Indonesia Stock Exchange during 2007 to 2011, (2) companies that regularly presents and publishes financial statements respectively during 2007 to 2011, (3) a company that has always and consistently not included in the black list Indonesia Stock Exchange during the period of study.

Dimensions Variable

$$\text{Tobin's Q} = \frac{MVS+D}{TA} \qquad [11]$$

$$ROA = \frac{\text{Net Income}}{\text{Total assets}} \qquad [9]$$

Analysis Method Used

Descriptive statistics were used to illustrate and describe the variables in this study. The analysis conducted is the description of the average value, minimum value and maximum value of each variable. Simple linear regression analysis is a linear relationship between an independent variable (X) with the dependent variable (Y). This analysis is to determine the direction of the relationship between the independent variables with the dependent variable whether positive or negative, and to predict the value of the dependent variable when the value of the independent variable increases or decreases.

Simple linear regression formula as follows:

$Y = a + bX$ [4]
Description:
Y = Tobin's Q
X = ROA
a = constant
b = coefficient of regression

5. Results

Table 1: Average ROA and Tobin's Q food and Beverage Company in Indonesia Stock Exchange in 2007-2011

Year's	ROA (%)	Tobin's Q (%)
2007	-1.152	1.521
2008	-1.398	1.094
2009	8.879	1.611
2010	9.160	2.019
2011	10.912	1.980

Based on the table above, the maximum value of ROA occurred in 2011 amounted to 10 912% and ROA occurred while the minimum value in 2008 of -1398. Maximum value of Tobin's Q occurred in 2010 amounted to 2019 while the minimum value of Tobin's Q occurred in 2008. Value ROA and Tobin's Q has decreased in 2008 due to impact of the global financial crisis, the value of ROA and Tobin's Q has increased again in 2010-2011.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square
1	.382[a]	.146	.131

a. Predictors: (Constant), ROA

Based on Table Model Summary, The magnitude of the effect on Tobin's Q ROA of 14.6% and ROA outside factors that affect Tobin's Q of 85.4%.

Table 3: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.613	.283		5.705	.000
ROA	2.550	.810	.382	3.148	.003

a. Dependent Variable: TobinsQ

Tobin's Q = 1613 + 2.55ROA

Return On Assets (ROA) has a regression coefficient of 2:55 states that any increase Return On Assets (ROA) of 1% it will increase the value of the company at 2:55. However, if the Return on Assets (ROA) decreased by 1%, the predicted value of the company decreased by 2:55.
Coefficients Table shows that the level of significance of p = 0.003> 0.05, it can be said that the performance of the company's influence on ROA. The study is in line with research conducted by Dodd and Chen (1996), Uchida (2006) Ulupui (2007) Carlson and Bathala (1997). This study is also consistent with the signaling theory. Dividend policy as described in signaling theory, stating that the manager is assumed to tend to maintain a dividend policy on a certain level, because the dividend will be responded by foreign investors as a signal delivered by the company, the dividend rate may be used as a signal increase future cash flows. Referring to the theory, the corporate performance (ROA) can also be used to respond to outside investors as a signal of information about the future cash flow dating because ROA is obtained from the net profit after tax is used as the basis for calculating net cash flow. Performance of the company will be seen as a barometer of the company's success in implementing a policy that has been taken. So, if the performance is good, evidenced by the large ROA, it responds with an outside investor to invest in the company. This could push the company's stock market price rises, and the rising price of the company's stock market value means the company also rose.

6. Conclusion

In 2008 the average value of ROA and Tobin's Q food and beverage companies on the Stock Exchange has declined due to the global financial crisis. The magnitude of the effect on Tobin's Q ROA of 14.6% and ROA outside factors that affect Tobin's Q of 85.4%. ROA significant effect on Tobin's Q, in line with the study by Dodd and Chen (1996), Uchida (2006) Ulupui (2007) Carlson and Bathala (1997) but not in line with the research done and Irwansyah Priest (2002).

7. Future Scope

Based on the analysis and discussion of some of the conclusions in this study, the suggestions that can be given by the results of this study in order to obtain better results, namely:

1. For investors who will invest in companies should use some variables in the measurement before making a decision because one variable cannot explain the overall information required.
2. Based on the information obtained from this study are expected to be able to run the company management company better and consistent so as to increase the profit that will increase the volume of trade shares and attract investors to invest their funds
3. The results of this research can provide information for research - subsequent studies using other study variables and increase the number of samples used.

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