Indicator Stock of Return from Side Probability

Nurhana Dhea Parlina*
Management Lecturer
Swadaya Gunung Jati of University
Cirebon, Indonesia
*nurhana_dp@unswagati.ac.id

Danang Nuswantoro
Student of Magister Management
Indonesian Computer University
Bandung, Indonesia
duswantoro@unswagati.ac.id

Abstract—This study is to improve the performance of stock investment returns in the pharmaceutical industry in Indonesia order to optimize the financial performance of profitability ratios both ratio as representative Return on Equity and Earning Per Share. Research methods using quantitative methods. There is causality of impact in probability side Return on Equity and Earning Per Share is Associate Method of research. Population in this studies chemical industry in sub sector pharmaceutical industry in Indonesia have been selected by using purposive sampling based on criteria of studies. The research data is the secondary data which has been obtained from this sample based on criteria of this research 30 total sample study from all population 10 the population there are 6 company sample of research. The output this research is different from the theory and journal forever with practice and application in the companies. That’s means uninfluenced of ROA and EPS to Stock of Return the Pharmaceutical industry company listed in BEI in the year’s period of 2011-2015*. The result is uninfluenced influence ROA and EPS to Stock of Return with together the proportion is -6.4%.

Keywords: ROA, EPS, Stock of Return

I. INTRODUCTION

The rate of growth in global markets has also slowed but remains stronger than Canada, mainly due to strong growth in emerging markets. Slow growth in developed markets such as Canada, the US (North American market grew 3.1% in 2011) and Europe (1.6% growth in 2011) have been offset by the extraordinary and sustainable growth of emerging markets. Brazil and China recorded growth of 18.9% and 17.1% respectively in 2011. Slowing global growth continued in 2012, at a rate of 3.5% through June 2012 and slower than the 5% experienced in 2011 and 2010. Indonesia is one of the developing countries of GP Pharmacy Indonesia, the dependence of imported raw materials for medicines reaches 95% with the majority of importing countries namely China, India, Japan, and several countries in Europe. The portion of raw materials will affect the structure of the drug around 20% -30% of the factory selling price, of course, to reduce imports so that it can reduce the price of drugs in Indonesia so that the current challenge is how to reduce imports of raw materials so that the selling price of drugs becomes cheaper with sales volume and the value keeps on increasing. Thus, Investors have a high chance of obtaining investment funds from investment returns through the pharmaceutical industry in Indonesia. The data on the population each year and the number of sales from the pharmaceutical industry in Indonesia 2010-2014 are generally presented in table 1. below:

The target market is the community whose function is to improve and strengthen the financial stability of investors while investing their funds. Return on Assets (ROA) is a measure of EAT in accordance with the level of assets [1].

Earning Per Share (EPS) is the yield based on per share invested [2]. Earning Per Share is one tool in measuring company performance, because the movement of the speed of growth based on the high and low of Earning Per Share will be determined by the company's profit.

Stock return is an investor's expectation of the return on investment of funds invested in accordance with the risks to be faced in the future [3].

The conclusion from these studies is variable ROA, DER, CR and EPS effect significantly to return shares [4]. A study found that both EVA and ROA had a positive and significant effect on shareholder value (CSV) as measured by Fernandez Model and MVA for 2011-2015, respectively [5]. The results of this study also show that one financial measure is not enough to measure both the value of shareholders created and company performance [6]. In addition, tests of increased information content show the opposite. We found several things that have consistent predictive power such as price, special risk, short-term reversal, book-to-market ratio, cash-flow-to-price ratio, and earnings-to-price ratio. Both the portfolio and cross sectional regression methods mark these variables as statistically and economically significant return predictors. This study found a significant impact on stock returns from profitability, turnover and market ratios [7,8]. However, the same does not apply to EPS [9]. This means that the effect of Return On Equity (ROE) and Earning Per Share (EPS) on financial leverage is 14.1% while the rest (100% - 14.1%) is 85.9% which may be influenced by other factors, such as fundamental information and technical information

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>Pharmacy Sales (USD Billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>204.7 million</td>
<td>4.85</td>
</tr>
<tr>
<td>2011</td>
<td>243.8 million</td>
<td>4.85</td>
</tr>
<tr>
<td>2012</td>
<td>246.9 million</td>
<td>5.88</td>
</tr>
<tr>
<td>2013</td>
<td>249.9 million</td>
<td>6.61</td>
</tr>
<tr>
<td>2014</td>
<td>233.6 million</td>
<td>7.4</td>
</tr>
</tbody>
</table>

Source: Badan Pusat Statistik dan Indonesian Pharmacommunity
In summary of the findings, the regression result suggests that sustainability reporting has a positive relationship with firm performance when using return on asset and earnings per share [11]. Using mixed effect model, we find that EVA does explain the annual stock returns of these Indian firms better than ROA and ROE [12]. In this study the researcher used has five independent variables and one dependent variable. Earnings per share, quick ratio, return on assets, return on equity, and net profit margin is used as independent variables while stock returns is used as dependent variable [13]. The results of this study indicate that price earnings ratio, earnings per share, debt to equity ratio and net profit margin have no significant effect on stock returns [14]. While return on equity has a significant positive effect on stock returns [15]. Hosseini, S. from the control variables return on equity, earnings per share and firm size has statistically significant positive relationship with stock return [16].

The study finds that profitability, turnover and market ratio has significant impact to the stock return [17]. Return on Equity no significant effect on stock returns and variables Earning Per Share is not significant negative effect on stock returns. Keywords: current ratio, debt to equity ratio, return on equity, earnings per share, stock return [18]. The result of this research that ROA, EVA, MVA, Stock Liquidity, Growth Opportunities, and Interest Rate have no effect to Stock Returns [19].

II. METHOD
A. Research Methods
This type of research used in this study is to use associative in This study uses quantitative research methods, because the purpose of this study is to determine the effect of ROA and EPS on Stok Return through statistical testing.

Independent variable in this research of ROA and EPS on Stok Return as independent variable through statistical testing.

Data collection techniques in this study using quantitative based on time series data of numeric measurement scale using a ratio scale. Data analysis techniques used multiple regression analysis.

Sugiyono [20] with quantitative methods according to Sugiyono [21]. The tool used in this study was the SPSS (Statistical Product and Service Solution) version 23.00 program.

<table>
<thead>
<tr>
<th>No</th>
<th>Variable</th>
<th>Indicator</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ROA (X1)</td>
<td>( \frac{EVA}{Total \text{ Asset}} )</td>
<td>Ratio</td>
</tr>
<tr>
<td>2</td>
<td>EPS (X2)</td>
<td>( \frac{EVA}{Total \text{ Shares Outstanding}} )</td>
<td>Ratio</td>
</tr>
<tr>
<td>3</td>
<td>Stock Return (Y)</td>
<td>( \frac{P_t - P_{t-1} + Dt}{P_{t-1}} )</td>
<td>Ratio</td>
</tr>
</tbody>
</table>

Source: [3,22,23]

B. Sample and Population
The population in this study are companies that are classified into the Goods and Consumption sector and Pharmaceutical sub-sectors listed on the Indonesia Stock Exchange from 2011 to 2015, as many as 10 companies in the pharmaceutical sub-sector in Indonesia.

Purposive sampling technique is a data source sampling technique with certain considerations. In this technique, the sample must meet the following criteria [24]:

- The sample companies are pharmaceutical companies listed on the Indonesia Stock Exchange (IDX) from 2011-2015.
- Pharmaceutical companies that publish annual audited financial statement data for the period 2011-2015.
- Pharmaceutical companies that are still active in trading shares on the Indonesia Stock Exchange for the period 2011-2015.
- Pharmaceutical companies that received positive profits during the 2011-2015 period.
- Pharmaceutical companies that submit financial statements of rupiah currency during the 2011-2015 period.

According to Roscoe, the following rules are proposed to determine the sample size in Sekaran, namely "Sample sizes greater than 30 and less than 500 are appropriate for most studies" [25].

Based on the above criteria, there are 6 pharmaceutical companies that meet the requirements as samples in this study. The following are the samples used in this study:

<table>
<thead>
<tr>
<th>No</th>
<th>Code</th>
<th>Company List</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DVLA</td>
<td>PT. Darya-Varia Laboratora Tbk.</td>
</tr>
<tr>
<td>2</td>
<td>KAEF</td>
<td>PT. Kimia Farma Tbk.</td>
</tr>
<tr>
<td>3</td>
<td>KLBF</td>
<td>PT. Kalbe Farma Tbk.</td>
</tr>
<tr>
<td>4</td>
<td>MERK</td>
<td>PT. Merck Tbk.</td>
</tr>
<tr>
<td>5</td>
<td>SQBB</td>
<td>PT. Thaiso Pharmaceutical Indonesia Tbk.</td>
</tr>
<tr>
<td>6</td>
<td>TSPC</td>
<td>PT. Tempo Scan Pasific Tbk.</td>
</tr>
</tbody>
</table>

Source: [26]

C. Data Analysis Method
1) Multiple regression: Multiple Regression is used to test hypotheses about two or more independent variables together with one dependent variable [27]. The multiple regression equation is as follows:

\[
Y = a + b_1X_1 + b_2X_2
\]

- F Test
- Classic Assumption Test
- The classic assumption tests used are normality, multicollinearity, autocorrelation and heteroscedasticity.
III. RESULTS AND DISCUSSION

A. Classic Assumption

1) Normality: In the normal plot shows that the distribution pattern is normal, then the regression model meets the normality assumption.

2) Multicollinearity: That the magnitude of the correlation between the dependent variable Stock Return that has a high enough correlation with the profitability variable (ROA) with a correlation level of -0.004 or about -0.004% while (EPS) with a correlation level of -1.624 or about -1, 624 % it can be said that there is no serious multicollinearity.

3) Heteroscedasticity: From the scatterplot graph it can be concluded that there was no heteroscedasticity.

4) Autocorrelation: DW value of 1.481 with a significance of 5%, the number of samples 30 (n) and the number of independent variables 2 (k = 2), then the value obtained from the Watson durbin table is 1.481 smaller than the upper limit du = 1.567 and less than 4 - 1.567 (4 - 1.567) or it can be concluded that autocorrelation did not occur.

B. Multiple Regression

**TABLE IV. COEFFICIENT OF DETERMINATION**

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.098</td>
<td>.010</td>
<td>.064</td>
<td>$3.54232</td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), EPS, ROA

From the results of table 4 above in the summary model, this means -6.4% variation in capital structure is not explained by the third variation independent of Company Size and Profitability (ROA). While the remaining 100% -6.4% = 93.6% is explained by other causes outside the overall model.

**TABLE V. ANOVA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Square</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>541.208</td>
<td>2</td>
<td>271.154</td>
<td>.130</td>
<td>.879</td>
</tr>
<tr>
<td>Residual</td>
<td>2.866.780</td>
<td>29</td>
<td>2.866.780</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>78.148.167</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: RETURN_SAHAM

From the results of table 5 above in the ANOVA that the calculated F value is 0.130 < F table 3.32. The result is that ROA and EPS together do not affect the Stock Return. Meanwhile, the Significance Value of 0.879> 0.05 then the regression model cannot be used to predict Stock Return, it is said that ROA and EPS together do not have an insignificant effect on Stock Return in this result of studies the same as Zalman and Surya [14]. The results of this study indicate that price earnings ratio, earnings per share, debt to equity ratio and net profit margin have no significant effect on stock returns [15]. The study finds that profitability, turnover and market ratio has significant impact to the stock return [18]. Return on Equity no significant effect on stock returns and variables Earning Per Share is not significant negative effect on stock returns. Keywords: current ratio, debt to equity ratio, return on equity, earnings per share, stock return. The result of this research that ROA, EVA, MVA, Stock Liquidity, Growth Opportunities, and Interest Rate have no effect to Stock Returns [19].

IV. CONCLUSION

This study there is no effect of ROA and EPS on Stock Return together. The Indonesian government reduces imports of pharmaceutical raw materials from other countries, so as to reduce the selling price of drugs to be cheaper. So if the price of medicine is getting cheaper then the return on investment of stock produced will be increase because in this year 2019 government minimize import 50% for the raw material for generic product, but in the other side government give policy to inject fund industry of pharmacy create, produce implementation research and development for close cost of finding pharmacy in retain earning. Limitation this result of studies ROA and EPS to Stock of Return.

Advise for The next studies:

- For another studies an add the variable such as in the stock return of indicator included like return earning.
- The method uses Intervening, Lisrel, OLS (Ordinary Least Square) and AMOS

REFERENCES


