The Effect of DER and ROE On Stock Price JII Companies

Chairunisa Puspa Juwita, Nana Diana

Faculty of Economics, Universitas Singaperbangsa Karawang, Karawang, Indonesia

Abstract

The purpose of this study is to test the effect of Debt to Equity Ratio (DER) and Return on Equity Ratio (ROE) on Stock Price in the Jakarta Islamic Index Companies period 2015-2019. This study found phenomenons of DER and ROE in the Jakarta Islamic Index Company that contradicted the theoretical concept that connects its effect on stock prices. Then, there are still results of previous studies that have not been consistent regarding the influence of debt to equity ratio and return on equity on sharia stock prices. This study used quantitative research by using a purposive sampling method and obtained 12 companies. The data obtained by the annual company financial report of JII companies during 2015-2019. Data analysis used in this study is multiple linear regression analysis using SPSS Statistics 22. The result of this study shows DER does not affect the stock price partially while ROE has a significant positive effect on the stock price while simultaneously debt to equity ratio and return on equity affect the stock price.

INTRODUCTION

Jakarta Islamic Index (JII) is one of the sharia stock indexes on the Indonesia Stock Exchange which consists of 30 most liquid stocks and the largest capitalization value that meets the criteria of sharia established by the National Sharia Board (DSN). This index is used as a benchmark to measure the performance of an investment in shares on an Islamic basis. Through this index, it is expected that investor confidence will increase to develop its investment in sharia. The JII Index prepared by PT Indonesia Stock Exchange (IDX) with PT Danareksa Investment Management (DIM). Determination of criteria for share selection in JII involves the Sharia Supervisory Board of PT Danareksa Investment Management (Soemitra, 2017, 129).

In determining the shares included in the JII calculation, then the process is carried out as follows: 1) The selected shares are based on the List of Sharia Securities (DES) issued by Bapepam-LK, 2) Selecting 60 shares from the Sharia Securities List based on the largest market capitalization in the last 1 year, 3) From those 60 shares, 30 shares were selected based on liquidity level, namely the value of transactions on the regular market for the past 1 year (Indonesia Stock Exchange, 2010).

OJK issues a Sharia Securities List (DES) contains shares that meet the criteria for being sharia shares. Sharia Securities List (DES) was published in 2007 as an implementation of Regulation No. I.I.K.1 concerning Criteria and Issuance of List of Sharia Securities. Furthermore, DES is updated periodically 2 (two) times a year, namely at the end of May and the end of November (Direktorat Pasar Modal Syariah Otoritas Jasa Keuangan, 2015).

A stock can be categorized as sharia stock if it meets the criteria and has passed through the sharia stock screening process. Public companies that have met the criteria for sharia stock screening then the shares will be contained in the List of Sharia Securities (DES). The Financial Services Authority (OJK) in the Islamic capital market
book explains that there are 3 stages for a stock to be included in the category of sharia shares, as follows: (a) Business Screening, not conducting business among others such as gambling and its kind, prohibited trade, ribawi financial Services, buying and selling risks which contain elements of uncertainty (Gharar) and gambling (Maisir), production or distribution of Haram product, ruining moral or mudharat, Bribery Transactions, (b) Sharia Screening, not conducting transactions that are contradicted to Islamic principles in the capital market, (c) Financial Screening consist of Total interest based debt compared to total assets not more than 45%, Total non halal income compared to total income not more than 10%. The criteria of sharia share are in accordance with the DSN / MUI Fatwa Number: 40 / DSN-MUI / X / 2003 concerning the Capital Market.

Based on data obtained from the Financial Services Authority (OJK) shows that the development of the JII index during 2015-2019 is showing relatively unstable. From 2015 to 2017 JII index has increased while in 2018 has decreased and experienced an increase in 2019. In 2015 the JII index closed 599.44 points and experiencing an increased to 694.13 in 2016 and continue increasing by 759.07 in 2017. In 2018 JII closed to 685.22, experiencing a decrease from the previous period and experiencing an increase again to 698.09 in 2019. It can be seen that the strengthening and weakening of the JII index influenced by the stocks in it. In daily trading activities, the price of shares on the stock exchange fluctuates. The formation of stock prices occurs because of the demand and supply by the market for these shares. The demand and supply occur because of the influence of many factors, both those that are specific to the stock such as the performance of the company and the industry in which the company is engaged and macro factors such as interest rates, inflation, exchange rates, and non-economic factors such as social and political conditions, and other factors (Soemitra, 2017).

Knowing the condition of a company’s performance is important to be a consideration for investors before investing in shares. One of the analysis conducted by investors is to do fundamental analysis. Fundamental analysis considers the company’s financial statements as an illustration of the company’s financial performance. The performance of a company can be measured by the company’s financial performance which can be seen in the financial statements through financial ratios owned by the company. The ratios used in this study are the debt-equity ratio (DER) and return on equity (ROE) in the Jakarta Islamic Index companies. Both ratios are using because they had phenomena that are contrary to theory. In a certain period, the average DER ratio fluctuates while the ROE ratio has decreased so that they are not in line with the theoretical concept that connects its effect on stock prices. Then, there are still results of previous studies that have not been consistent regarding the influence of debt to equity ratio and return on equity on sharia stock prices.

Debt equity ratio is the ratio used in assessing debt to equity. This ratio is sought by comparing all debt, including current debt with all equity. Thus, this ratio is used to determine the number of funds provided by the borrower (the creditor) with the owner of the company and serves to find out every rupiah of capital used as guarantees for the debt. The greater this ratio, the more unprofitable for banks (creditors) because the risk borne will be even greater for failures that may occur in the company. As for companies, the lower ratio then the higher the level of funding provided by the owner and the greater the security limit for the borrower in the event of loss or depreciation of the value of the asset. This ratio provides general guidance regarding the financial viability and risk of the company (Kasmir, 2019). Based on data proceed obtained from the Indonesia Stock Exchange (IDX) performance summary of JII company during 2015-2019 shows that in 2015 the average value of the DER ratio showed the number of 1.137 decreased dramatically to 1.058 in 2016. Then, in 2017 the DER value increased to 1.14. DER experiencing to decrease to 1.1366 in 2018 and in 2019 experiencing decrease to 1.124. Increasing the DER from 2016 to 2017 is in line with the increase of stock price from 2016 to 2017 and decreasing of DER from 2017 to 2019 is in line with decreasing in stock price from 2017 to 2019. In this case, the relationship between DER and stock price is opposite to the theory according to Liembono (2013) which states that the greater of DER ratio, the stock price decreases. The results of research conducted by Yulsiati (2016) found that Debt to Equity Ratio has an effect to the stock price while research conducted by Hasanah and Ainni (2019) shows the opposite results, namely debt to equity ratio does not affect sharia stock prices.

Return on equity is the ratio used to measure net income after tax with equity. This ratio shows the efficiency of using their capital. The higher this ratio is better. It means that the position of the owner of the company is getting stronger, and vice versa (Kasmir, 2019). Based on data proceed obtained from the Indonesia Stock
Exchange (IDX) performance summary of JII company during 2015-2019 shows that in 2015, the average value of JII companies was 17.6 decreased to 17.25 in 2016. In 2017, it was decline to 15.2 and continued to decline to 13 in 2018. In 2019, ROE continued to decrease as 11.4. Decreasing the ROE from 2015 to 2017 was accompanied by increasing stock prices from 2015 to 2017. So, this is opposite to the theory according to Liomboko (2013) which states the greater of ROE ratio, the stock price increases. The results of research conducted by Febrianti (2017) and Hasanah and Aini (2019) found that Return on Equity has effect to the stock price. The results of research conducted by Qaisi, Tahtamouni, and Al-Qadah (2016) and Purnamasari (2016) show that ROE does not affect sharia stock prices.

Based on the results of previous research and the phenomena described above, this study is limited only to analyzing the effect of the Debt to Equity Ratio (DER) and Return On Equity (ROE) partially and simultaneously on Stock Prices in the Jakarta Islamic Index (JII) Period 2015-2019. Furthermore, the problem to be investigated is how much influence the Debt to Equity Ratio (DER) and Return On Equity (ROE) have on stock prices in the Jakarta Islamic Index (JII) 2015-2019 group both partially and simultaneously.

### Hypotheses Development

**H1:** Debt to equity ratio affect the stock price

**H2:** Return on equity ratio affect the stock price

**H3:** Debt to equity ratio and Return on Equity affect the stock price.

**METHOD**

Analysis method that used in this study is multiple linear regression analysis. Multiple linear regression analysis is used to determine the effect of the independent variable on the dependent variable. Multiple linear regression aims to determine the effect of two or more independent variables on one variable and predict the dependent variable by using two or more independent variables (Rochaety, 2019). The independent variable consists of debt to equity ratio (DER) and return on equity (ROE) while the dependent variable is the stock price.

Population in this study were all of Jakarta Islamic Index (JII) companies on the Indonesia
Stock Exchange during the 2015-2019 period, namely 47 companies while sample in this study were 12 companies. The data source in this study is 5 years in 12 companies in the Jakarta Islamic Index (JII) on the Indonesia Stock Exchange so that the data used are 60 data (5 years x 12 companies = 60 data).

The type of data and source of data in this study are quantitative data with secondary data, namely the annual company financial reports in the Jakarta Islamic Index (JII) on the Indonesia Stock Exchange in the 2015-2019 period accessed through the official website of IDX (www.idx.co.id) and the company's official website.

Data collection techniques in this study were obtained through documentation method and library research. The documentation method in this study was conducted by collecting data from existing documents, namely the Jakarta Islamic Index (JII) company report from the year of 2015-2019 on the Indonesia Stock Exchange. This research was conducted by studying and understanding data obtained through various literature, such as books, journals, articles/internet websites related to the discussion of this research. Sampling technique that used in this study was conducted with purposive sampling with the following criteria (1) All of the companies that incorporated in the Jakarta Islamic Index (JII) on the Indonesia Stock Exchange are listed on the IDX during the 2015-2019 period; (2) Companies that experience substitution and are not consistent get into the Jakarta Islamic Index (JII) during the 2015-2019 period; (3) The financial statements are not presented in rupiah / IDR.

Descriptive statistics are statistics used to analyze data by describing data that has been collected without intending to make conclusions that apply to the public or generalization. In descriptive statistics, among others, are through the presentation of data through tables, graphs, pie charts, pictograms, mode calculation, median, mean (a measurement of central tendency), decile calculation, percentile, calculation of data distribution through average calculation, and standard deviation, percentage calculation. (Sugiyan, 2017). In this study, the statistics used are mean, standard deviation, variation, minimum value, maximum value.

For estimating the model regression, it used the F test (simultaneous test) and t-test (partial test). Before using the regression hypothesis test, the classical assumption tested underlies the use of the regression equation. The classic assumption tests include Normality, Multicollinierity, Heteroscedasticity, and Autocorrelation Test.

For finding out the effect of debt to equity ratio and return on equity on stock prices in JII companies during the 2015-2019 period then the data testing is doing by SPSS 22.

Variable of stock price in this study measured by stock price that formed on the stock market, namely the annual average of closing price (Darmadji & Fakhrudin, 2012).

Debt-equity ratio is a ratio used to assess a company’s ability to pay its obligations with own capital. From this understanding, the debt to equity ratio formula according to Kasmir (2019) to find the debt to equity ratio (DER) can be used as a comparison between total debt and total equity as follows:

\[
\text{Debt Equity Ratio} = \frac{\text{Total Debt}}{\text{Total Equity}}
\]

Return on equity (ROE) is a ratio used to measure the extent of the company’s ability to generate profits with their equity. To find out the return on equity in a company, the following formula according to Kasmir (2019) can be used as follows.

\[
\text{Return on Equity} = \frac{\text{Earning After Interest and Tax}}{\text{Total Equity}}
\]

The equation of multiple linear regression analysis used to test the hypothesis in this study can be formulated as follows:

\[
Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + e
\]

Where:

- \(Y\) = Stock Price
- \(\alpha\) = Constanta
- \(\beta_1-3\) = Independent Variable Regression Coefficient
- \(X_1\) = Debt to Equity Ratio (DER)
- \(X_2\) = Return on Equity (ROE)
- \(e\) = Standard error

RESULT AND DISCUSSION

This research is focusing on the influence of Debt to Equity Ratio (DER), Return of Equity (ROE), and Stock Prices. The companies researched those only companies that sampled. This study uses object companies that are consistently registered in the Jakarta Islamic Index (JII) during the 2015-2019 period.

Descriptive Statistics

Descriptive statistics describe the descrip-
tion of a variable data with the statistic that refer to the mean and standard deviation values, minimum and maximum values and from all variables in this study, namely Stock Price as the dependent variable, Debt to Equity Ratio and Return On Equity as independent variables during 2015-2019 research period presented in table 1 below this:

Table 1. Result of Coefficient Summary Test (R2)

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Min.</th>
<th>Max.</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>DER</td>
<td>50</td>
<td>0.05</td>
<td>2.90</td>
<td>1.1440</td>
<td>0.79633</td>
</tr>
<tr>
<td>ROE</td>
<td>50</td>
<td>2.92</td>
<td>135.85</td>
<td>22.8958</td>
<td>31.56689</td>
</tr>
<tr>
<td>STOCK PRICE</td>
<td>50</td>
<td>1255</td>
<td>55900</td>
<td>8103.8200</td>
<td>11759.770</td>
</tr>
</tbody>
</table>

Table 1 shows the research on 50 samples data from Jakarta Islamic Index Companies listed on Indonesia Stock Exchange during 2015-2019, while the result of descriptive statistics are:

**Debt to Equity Ratio (DER)**

Debt to Equity Ratio has a minimum value of 0.05 found in PT Kalbe Farma Tbk in 2019 and a maximum value of 2.9 found in PT Unilever Indonesia Tbk in 2019. Difference between the minimum and maximum values is 2.85. Mean value of DER during 2015 until 2019 is 1.144 while the standard deviation is 0.79633. It shows that the mean value is bigger than the standard deviation (1.1440 > 0.79633) so this indicate good result because data has small distribution or the absence of a large enough gap from the lowest and the highest, normal and does not cause bias.

**Return on Equity (ROE)**

Return on Equity has a minimum value of 2.92 found in PT Bumi Serpong Damai Tbk in 2018 and a maximum value of 135.85 in PT Unilever Indonesia Tbk in 2018. Difference between the minimum and maximum values is 132.93. Mean value of ROE during 2015-2019 is 22.8958 while the standard deviation is 31.56689. It shows that the mean value is smaller than the standard deviation (22.8958 < 31.56689) so this indicates poor results because data has big distribution.

**Stock Price**

Stock price has a minimum value of Rp 1,255 found in PT Bumi Serpong Damai Tbk in 2018 and 2019 and a maximum value of Rp 55,900 in PT Unilever Indonesia Tbk in 2017. Difference between the minimum and maximum values is Rp 54,645. Mean value of ROE during 2015-2019 is 8103.82 while the standard deviation is 11759.770. It shows that the mean value is smaller than the standard deviation (8103.82 < 11759.770) so this indicates poor results because data has big distribution.

**Data Analysis**

Determinant coefficient (R2) is used to find out how far the model’s ability of independent variable explain the variation of the dependent variable. The coefficient value of determination is between zero and one. A small of R2 value indicates the ability of the independent variables to explain the variation of the dependent variable is very limited. A value of R2 which close to one indicates that the independent variables provide almost all of the information needed to predict the variation of the dependent variable (Ghozali, 2016). The test results of the determination coefficient shown in table 2.

Table 2. Result of Coefficient Summary Test (R2)

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.937a</td>
<td>0.879</td>
<td>0.873</td>
<td>4184.062</td>
<td>0.000b</td>
</tr>
</tbody>
</table>

The result of coefficient summary show that the correlation value is 0.937, then the coefficient of determination (R2) is 0.879. It means that there is an influence between the Debt Equity Ratio and Return on Equity on Stock Price as 87.9% while the remaining as 12.1% is influence by another variables beyond research.

**Partially Test (t-Test)**

The t-test (partial test) is used to test the effect of independent variables, namely Debt to Equity Ratio and Return on Equity to the dependent variable, namely Stock Price which is tested at a significance level of 5% partially. The basis for hypothesis decision making is based on a significance of 0.05 (α = 5%). The criteria used in the t-test are comparing the significance level (α) of 0.05 (5%) with the significance rate (sig.) of
research, if the probability (research sig) > 0.05 then H0 is accepted and Ha is rejected while if the probability (research sig) < 0.05 then H0 is rejected and Ha is accepted. The t test results in this study shown in table 3.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>97.357</td>
<td>1046.032</td>
<td>1.093</td>
<td>0.926</td>
</tr>
<tr>
<td>DER</td>
<td>12.821</td>
<td>826.295</td>
<td>1.001</td>
<td>1.016 0.988</td>
</tr>
<tr>
<td>ROE</td>
<td>349.051</td>
<td>20.845</td>
<td>1.937</td>
<td>16.745 0.000</td>
</tr>
</tbody>
</table>

**Regression Equation**

\[
\text{Stock Price} = 97.357 + 12.821\text{DER} + 349.051\text{ROE} + \epsilon
\]

Constant value of 97.357 indicates that if the value of DER and ROE is fixed or 0, then the value of the stock price is 97.357.

The regression coefficient of the DER variable has a positive value of 12.821. It means that an increase in the DER variable by 1 unit will increase stock prices by 12.821 with the assumption that other independent variables have a fixed value.

The regression coefficient of the ROE variable has a positive value of 349.051. It means that an increase in ROE variable by 1 unit will increase stock prices by 349.051 with the assumption that other independent variables have a fixed value.

Based on the test results, it obtained a significance value 0.988 > 0.05. It can be concluded that Ho accepted and Ha rejected. Then, Debt to Equity Ratio does not a significant positive effect on the stock price. So that the first hypothesis (H1) which state “H1= Debt to Equity Ratio has an effect on the stock price partially” is rejected.

Based on the test results, based on the t-Test result which containing in the table 3, it obtained a significance value 0.000 which is smaller than 0.05, which means that Ho rejected and H3 accepted. Thus, it can be conclude that debt to equity ratio and return on equity together have an influence on stock price.

**The Effect of Debt Equity Ratio on Stock Price**

Debt to Equity Ratio does not affect on Stock Price in Jakarta Islamic Index companies listed on the Indonesia Stock Exchange during 2015-2019. Based on the results of the T-test it can be seen that the DER t-count is 0.016 smaller than the t-table of 2.01174. The significance value of 0.988 is greater than 0.05. It means that DER has a positive and not significant effect on stock prices.

This is contra with the theory from Liembono (2013) states that high of debt to equity ratio will make the stock prices decline. A high DER ratio indicates that the company’s finances will be drained for financial burdens/debt interest expenses so that it becomes fragile or vulnerable to changes in macroeconomics, for example, changes in interest rates. So that, the greater the ratio then the more risk of the stock price will decline, and vice versa.

However, the result in this study is show that debt to equity ratio does not have an effect to the stock price. This means that investors do not pay attention to DER as the main consideration in making decisions related to the decline and increase experienced by the DER ratio. This is because companies whose shares enter the JII index must meet the criteria that the total interest-based debt to total assets must not exceed 45%. If more than 45%, the company’s shares will be removed from the List of Sharia Securities (DES). Thus, the existence of these criteria can make investors believe that the debt ratio owned by JII companies will always be observed and monitored by the OJK and will make the company continue to
improve its company performance. Besides, the average trend in JII company stock prices showed a decrease in 2018 and 2019, which was similar to the DER trend. The JII company showed a decrease in 2018 and 2019 where this was contradictory to the theory that when DER fell, stock prices rose. The decline in stock prices as indicated by external factors, namely the trade war between China and America which caused the Global economy to slow down and cause the IHSG to plummet (tirto.id, 2019). The drop in the IHSG will make JII drop because the majority of JII shares are in the IHSG.

The result of this study are consistent with the research conducted by Hasanah and Aini (2019) found that debt to equity does not have significant effect on the stock price. This is line with the result which conducted by and Safitri (2013) found that Debt to Equity Ratio does not effect on Stock Price.

**The Effect of Return on Equity on Stock Price**

Return on Equity Ratio has a significant positive effect on Stock Price in Jakarta Islamic Index companies listed on the Indonesia Stock Exchange during 2015-2019. Based on the results of the T-test it can be seen that the ROE t-count is 16.745 bigger than the t-table of 2.01174. The significance value of 0.000 is less than 0.05 so that ROE has a positive and significant effect on stock prices. It means that the investors pay attention to the increase and decrease in ROE which is used as a decision in investing in a company. The high ROE indicates that the profit that generates from company is high and the company had effective in managing their capital to generates high profit. So as showing that the company in good performance and good signal for stockholder because they will receive high benefits. The more able the company is to provide benefits for shareholders, the more the shares are wanted to be bought. This will cause demand for these shares to increase and will subsequently cause the price of the shares to rise.

The result of this study are consistent with the research conducted by Febrianti (2017) found Return on Equity Ratio have positive effect on the stock price. This is line with the result conducted by Arkan (2016) that return on equity have positive significant on stock price.

**CONCLUSION AND RECOMMENDATION**

Based on the result of the analysis and discussion described above, it can be concluded that: (1) Partially, Debt to Equity Ratio does not have effect on stock price in Jakarta Islamic Index Companies listed on Indonesia Stock Exchange period 2015-2019 (2) Partially, Return on Equity have effect on stock price in Jakarta Islamic Index Companies listed on Indonesia Stock Exchange period 2015-2019 (3) Simultaneously, Debt to Equity Ratio and Return on Equity on stock price in Jakarta Islamic Index Companies listed on Indonesia Stock Exchange period 2015-2019. This research conduct at companies that are members of the JII during the 2015-2019 period and only used two ratios, namely DER and ROE. For further research, it expected will be carried out by incorporating other factors that can affect sharia stock prices both from internal factors and external factors as well as adding years because each year has different phonemes related to the development of JII stock prices.

**REFERENCES**


