Influence Return on Equity Ratio, Debt to Equity Ratio, and Net Profit Margin Against Stock Price Jakarta Islamic Index

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Abstract
This study aims to determine the effect of ROE, DER, and NPM on Jakarta Islamic Index (JII) stock prices, either simultaneously or partially. The type of research used in this study is quantitative research using descriptive methods and verification methods using the analysis method: Multiple Linear Regression, T Test, F Test, Determination Coefficient Test, and Classical Assumption Test using Stata 15 software. Based on the research results, the results of the analysis explain that ROE does not have a partial effect, but DER and NPM have a partial influence on the JII Stock Price. The results of the analysis also explain that the data is not infected with multicollinearity problems and does not contain heteroscedasticity, and simultaneously ROE, DER, and NPM have no influence on the JII Share Price with the ability to explain the JII Stock Price variance of 57.58%. Then the following conclusions are obtained: 1) The results of the simultaneous analysis show no significant effect between the variables ROE, DER, and NPM on the JII Stock Price. 2) The results of the partial test, it is known that DER and NPM have a positive and significant effect, but ROE has no positive and significant effect on JII's stock price.

Keywords: Return On Equity, Debt to Equity, Net Profit Margin.

Introduction
Finance is the most important element in a company's business, because this is what determines the business will develop or even vice versa. On that basis, to build a business from scratch, it takes an accountant or someone who can manage business finances who are skilled and experienced.

In a financial statement, there is a company's performance that can be calculated through profitability ratio analysis, one of which is Return on Equity (ROE). This ratio is useful to determine the efficiency of a company's management in running its capital, the higher this ratio means the more effective and efficient the company is in using its capital, and investor confidence in the capital invested is higher so that it will have a positive impact on its stock price (Asikin & Fadilah, 2024).

The value of a company is an achievement that can be seen from its financial performance. Increased profitability will also increase the profit retained by a company, so it will reduce the company's interest in lending and the Debt To Equity Ratio (DER) will decrease. The size of the company shows the activities of the company owned by the company. The larger the size of the company means the greater the assets that the
company can use as collateral to obtain debt so that then the company's Debt To Equity Ratio (DER) will increase.

The use of debt to meet the company's fund needs will generate profits and can result in risk losses from the use of debt. Debt results in a fixed expense, namely the interest and principal expenses that the company must pay, on the other hand debt is also a source of funds that can be used to finance company activities where this then the company can increase its ability to generate profits, and debt that the company uses as effectively as possible, which can then help the company's operational activities (Saebah & Asikin, 2022). Debt To Equity Ratio (DER) can describe the source of financing a company derived from debt. This will result in stock market reactions, stock trading volume and stock prices.

Apart from the ratio of profitability and liabilities, return from shares is the main goal of trading activities that all investors who will invest their shares in the capital market want to get (Kholipah, Askin, Mijoyo, Tarsini, & Khoerudin, 2024). Stock returns also make it possible for investors to compare the rate of return of one company with another. Net Profit Margin (NPM) is one of the ratios that can be used in measuring the margin of return on sales. This measurement method is by comparing net income after tax with the company's net sales. Net Profit Margin can show the company's performance is increasingly productive in generating profits, this is because profits are mostly generated from company sales.

In this study, researchers will use companies included in the Jakarta Islamic Index (JII). The reason this study uses the Jakarta Islamic Index (JII) as the object of research is because the general population of Indonesian people is the majority of Muslims, and JII is an index that collects the top 30 Islamic companies on the Indonesia Stock Exchange.

So based on this background, researchers make ROE, DER, and NPM as a benchmark urgency for the influence on the share prices of companies included in the Jakarta Islamic Index (JII), with the formulation of the problem which is also a special purpose to determine the effect of ROE, DER, and NPM on the share prices of companies included in the Jakarta Islamic Index (JII) both simultaneously and partially. Also, this research the author hopes that it can produce benefits theoretically and practically, by being able to become a reference material and literature in adding insight into the effect of Return On Equity

Debt To Equity Ratio, and Net Profit Margin to the share prices of companies included in the Jakarta Islamic Index (JII) and especially for future researchers and become a source of knowledge and information for the public in general and students in particular in assessing the health of company finances. So based on all these things, the researcher raised a study with the problems raised by the researcher in this study are "How the Effect of Return On Equity Ratio, Debt To Equity Ratio, And Net Profit Margin On The Stock Price Of The Jakarta Islamic Index".
Based on the analysis of the framework above, the hypotheses in this study are as follows:

**The Effect of Return on Equity (ROE) on Stock Price (X1)**

Return On Equity (ROE) makes a very important contribution to Share Price. According to Houston and Brigham (2010: 133) in Sanjaya Tomi's research (2015), this ratio is a very important ratio, because shareholders certainly want to get a high rate of return on the capital they invest, and Return On Equity shows the level they get. The greater the ability of a company to generate good profits, the greater the desire of investors for company shares.

In research researched by Yulsiati (2016) has the results that Return On Equity does not have a significant influence on stock prices with the conclusion that a decrease in Return On Equity will not necessarily reduce the stock price of a company, but will increase, in contrast to research researched by Ramdhani (2013) which states that partially Return On Equity has an influence on stock prices, which in this research shows that the higher the Return On Equity, it will increase the stock price with a fixed Earnings per Share condition. So based on the explanation above, researchers can form initial hypotheses for research as follows:

**H1:** Return On Equity (ROE) has a partial effect on the share prices of companies included in the Jakarta Islamic Index (JII).

**The Effect of Debt to Equity Ratio (DER) on Stock Price (X2)**

Debt To Equity Ratio (DER) makes a very important contribution to Share Price. Sartono (2001) observed that the debt ratio is the use of assets and sources of funds by a company that has fixed costs with the intention of increasing potential profits of investors. The debt ratio in this study is influenced by the company’s total capital and the company’s total debt. Debt to equity ratio is the amount of capital funded by debt.

Basically, the debt to equity ratio can show the source of funding for the company which will have an impact on stock market reactions and stock trading volume, so it will automatically affect stock prices. According to Hery (2011: 273) stock prices in the stock...
market are created from the interaction between sellers and buyers. High as well as low
stock prices in the market, can be influenced by factors such as debt ratios and profit
ratios. So based on the explanation above, researchers can form a second hypothesis for
research as follows:

H2: Debt To Equity (DER) has a partial effect on the share prices of companies included
in the Jakarta Islamic Index (JII).

The Effect of Net Profit Margin (NPM) on Stock Prices (X3)

Net Profit Margin (NPM) makes a very important contribution to the Share Price.
Tandelilin (2008: 239) in the journal Hutami (2012) High Net Profit Margin can show a
good performance of a company, because it can obtain a large net profit through its sales
activities so that many investors will be interested in the company's shares and then will
increase the company's stock price.

If the company's Net Profit Margin ratio is large, it shows that the company is
working well, because the company can earn a large net profit through its sales activities,
which investors can use in making further decisions, whether to buy shares of the
company, because the increased net profit will affect the investor's desire to invest their
funds in the company, which in turn will cause the company's stock price to increase in
the stock market.

Research that has proven that there is a significant influence between Net Profit
Margin on stock prices is by Pasaribu (2008), Anwar (2009), Rianti (2010), Hutami
(2012). The results complicate that Net Profit Margin has a significant influence on stock
prices. So based on the explanation above, researchers can form a third hypothesis for
research as follows: H3: Net Profit Margin (NPM) has a partial effect on the share prices
of companies included in the Jakarta Islamic Index (JII).

The Effect of Return on Equity (ROE), Debt To Equity Ratio (DER), and Net Profit
Margin (NPM) on Stock Price

Understanding the concept of ROE, DER, and NPM financial ratios is the most
important thing to determine the value of a stock, the better the company's Return On
Equity will indicate that the company has a good ability to manage the company's
profitability, by managing equity to its net income, as well as the Debt To Equity Ratio,
where the better the company's Debt To Equity Ratio will indicate that the company has
a good ability in managing the company's liabilities Erari (2014), both short and long
term, by managing equity against its total liabilities, and finally the better the company's
Net Profit Margin, it will indicate that the company has a good ability to manage
profitability by how much profit the company gets from the total revenue the company
gets. So based on the explanation above, researchers can form a third hypothesis for
research as follows:

H4: Return On Equity (ROE), Debt to Equity (DER), dan Net Profit Margin (NPM)
simultaneously affect the share prices of companies included in the Jakarta Islamic Index
(JII)).
Research Methods

The type of research used in this study is quantitative research. Quantitative research method is one type of research from various studies whose specifications are systematic, planned and also clearly structured from the beginning to the making of the research design. This research method, as mentioned by Sugiyono (2013), namely: "Research methods based on the philosophy of positivism, are used to examine certain populations or samples, data collection using research instruments, quantitative data analysis, with the aim of testing existing hypotheses”.

The methods used by researchers in this study are descriptive methods and verificative methods with quantitative analysis approaches. The descriptive method is intended to describe or describe each variable while the verificative method is intended to test the hypothesis. This research was conducted at the Islamic Economics Study Program, Faculty of Economics and Business, Universitas Brawijaya. The research was carried out in October 2022 until it was completed.

The population in this study is all companies listed on the Indonesia Stock Exchange. The sample of this study is companies included in the Jakarta Islamic Index (JII) listed on the Indonesia Stock Exchange in 2022 as many as 30 companies. In this study using the technique of Stratified Random Sampling. In this technique, a sample is determined with certain considerations, namely Return on Equity, Debt to Equity, and Net Profit Margin of companies contained in the Jakarta Islamic Index (JII) which according to the researchers' consideration that these companies have led other companies in these 3 variables.

The type of data used in this study is quantitative data. where quantitative data is a type of data that can be measured is also calculated directly, which contains information in the form of numbers (Sugiyono, 2011; 15). In this study the quantitative data needed are: Share Price, Return on Equity, Debt to Equity, and Net Profit Margin of all companies included in the Jakarta Islamic Index (JII). Data sources in research can be interpreted as subjects from which data can be retrieved (Arikunto, 2006; 129).

In this study, the author uses one data source, namely secondary data sources with data directly collected by researchers as support from the first source. In this study, the secondary data sources of this research are data that have been published by government and private institutions, articles, journals and related literature.

In conducting this research, the author carried out data collection techniques with documentation studies, namely collecting and studying data or documents that support research. This quantitative data analysis method is to process data using supporting software after the data is collected, processed, and cleaned. Data analysis aims to answer from the existing problem formulation which is then continued with hypothesis testing through data that has been collected and processed using quantitative techniques. In this study, researchers used data analysis methods through statistical formulas in Microsoft Excel and STATA 15 software.
Results and Discussion

Multiple Linear Regression Test

\[
\begin{align*}
\text{Y} &= 5.460385 + 9.766491 \text{ROEJII} + (-0.1179366) \text{DERJII} + (-2.169884) \text{NPMJII} \\
\end{align*}
\]

Based on the results of the analysis above, the following are the results of multiple regression analysis analysis. So from the results of the execution of multiple regression analysis above using statistical software stata 15 we can interpret into a regression model as follows:

\[
\begin{align*}
\text{Y} &= 5.460385 + 9.766491 \text{ROEJII} + (-0.1179366) \text{DERJII} + (-2.169884) \text{NPMJII} \\
\end{align*}
\]

From this equation we can interpret that coefficient is in the form of, Intercept 5.460385, ROEJII(X1) = 9.766491, DERJII(X2)=-0.1179366, dan NPMJII(X3) = -2.169884, so we can say, the X1 coefficient of + 9.766491 means that every 1 unit of X1 value will increase the Y value by +9.766491, the X2 coefficient of -0.1179366 means that every 1 unit of X2 value will reduce the Y value by -0.1179366, the X3 coefficient of = + -2.169884 means that every 1 unit of X3 value will reduce the Y value by -2.169884, and the constant by 5.460385 explains if X1 , X2 and X3 = 0, then Y = 5.460385.

Simultaneous Significance Test (F Test)

The following is the result of the analysis of the Simultaneous Significance Test (Test F) to see how all independent variables simultaneously affect the dependent variable and its interpretation. We can know that there are 3 regressions here with 3 residuals, which partially have sums of square of 0.058297835 and 0.01574251, and we will get the mean square after dividing the two sums of square by the degree of freedom of each regression and residual, and produce a mean square of 0.019432612 and 0.005247503, where the value of this mean square determines how much the result of the F test will be by dividing the mean square regression by the mean square residual.

Then it will result in an F test value of 3.70, or in simple language we can interpret that the three ROEJII, DERJII, and NPMJII simultaneously have a significant influence on JII Stock Harha of 3.70. The Significance F value has a value greater than 0.05 which
is 0.1554, which indicates that ROEJII, DERJII, and NPMJII do not have a simultaneous influence on JII's Share Price.

**Partial Parameter Significance Test (Statistical Test t)**

The following is the result of the analysis of the Partial Parameter Significance Test (Statistical Test t) and its interpretation. With the standard error of each ROEJII, DERJII, and NPMJII of 4.010472, 0.4085438, and 0.7071181, then we can interpret by testing the significance in the form of a T test, how the influence of each independent variable, in this case ROEJII, DERJII, and NPMJII partially on the dependent variable, namely the JII Stock Price, then by dividing each dependent variable by the standard error, we get the results of each t test from ROEJII, DERJII, and NPMJII of 2.44, -0.29, and -3.07.

So we can interpret that ROEJII can affect JII's Share Price by 2.44, then DERJII can have an influence of -0.29, and NPMJII can have an influence of -3.07. The t value for ROEJII has a value greater than 0.05 which is 2.44, which indicates that ROEJII has no partial influence on JII's Share Price, while the t value for DERJII and NPMJII has a value smaller than 0.05 which is -0.29 and -3.07, which indicates that DERJII and NPMJII have a partial influence on JII's Share Price.

**Coefficient of Determination Test (Adjusted R Square)**

The following is the result of the analysis of the Coefficient of Determination Test (Adjusted R Square) and its interpretation. After testing the equation we find the contribution of all independent variables to the dependent variable, namely by calculating by dividing the sum of square regression by the sum of square total in order to get R Square (coefficient of determination that explains how far the variance of bound data can be explained by free data), then we can see that SSR = 0.058297835 and SST = 0.01574251, so we get R Square = 78.74%.

This means that the ability of the independent variable to explain the variance of the dependent variable is 78.74%. This means that there is 21.26% variance of the dependent variable explained by other factors. However, in this study we will use Adjusted R Square, because most of the researchers use adjusted R square to anticipate the addition of new variables, it is obtained by 57.58%, then the contribution of all independent variables to the bound variable is 57.58%, meaning that the independent variables X1, X2, and X3 can explain the variance of variable Y by 57.58%, or in our current case the three ROEJII, DERJII, and NPMJII can explain the variance of the fixed variable JII Share Price of 57.58%.

**Classical Assumption Test**

**Multicollinearity Test**

Multicollinearity detection using auxiliary regression
The attached output results show that the data does not contract multicollinearity problems. The basis determines whether the data is affected by multicollinearity problems using auxiliary tests which if the value of the F-count is greater than the F-table. The F-calculated value in this regression result is 3.70 (F-statistic). Before finding the value of F-table, we first determine the value of df, where df = F-table = (k ; n-k) = (3 ; 4). So for the value of F-table we find by opening the F table, then found for this data F-table is 6.5913821. From these results it can be seen that the F-table value is 6.5913821, when compared with the F-count value then: F-count (3.70) < F-table (6.5913821), the conclusion is that the data does not contract multicollinearity problems because the F-count value is not greater than the F-table.

Deteksi Multikolinieritas use variance inflation factor (VIF)

Multicollinearity in a regression model can be digitized using the calculation of the Variance Inflation Factor (VIF) value. VIF is a factor that can be used as a reference for measuring how much the increase in the variety of estimating coefficients of a regression when compared to orthogonal independent variables when connected linearly. If there is a greater correlation between independent variables, the VIF value will be greater.

So if the VIF value is greater than 10 it can indicate the presence of multicollinearity. The symptom of multicollinearity poses a problem in regression models. Very high correlations between independent variables provide results for
estimators of regression models that become biased, unstable, and may be far from their predicted values (Farahani et al, 2010). So it can be seen that the VIF value in this regression model is 3.68, so there is no multicollinearity.

**Heteroscedasticity Test**

**Method Glejser**

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>Number of obs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>0.002339606</td>
<td>3</td>
<td>0.000779869</td>
<td>1.49</td>
</tr>
<tr>
<td>Residual</td>
<td>0.001569284</td>
<td>3</td>
<td>0.000523095</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>0.003908889</td>
<td>6</td>
<td>0.000651482</td>
<td></td>
</tr>
</tbody>
</table>

| absolute residual | Coef. | Std. Err. | t | P>|t| | [95% Conf. Interval] |
|-------------------|-------|-----------|---|------|---------------------|
| ROEJII            | 0.8833532 | 1.26622 | 0.70 | 0.536 | -3.146325 - 4.913031 |
| DERJII            | -0.01294093 | 0.1289889 | -0.10 | 0.926 | -0.4234406 - 0.3975599 |
| NPMJII            | -0.3313591 | 0.2232573 | -1.48 | 0.184 | -1.041863 - 0.3791453 |
| _cons             | -0.0267668 | 0.2244359 | -0.12 | 0.913 | -0.7410221 - 0.6874884 |

* OLS Glejser Lagrange Multiplier Heteroscedasticity Test

Ho: No Heteroscedasticity - Ha: Heteroscedasticity

Glejser LM Test = 1.64738
Degrees of Freedom = 3.0
P-Value > Chi2(3) = 0.64869

The glacier test is the most commonly used statistical test. According to Gujarati (2003) in Ghozali (2011), the glacier test uses residual absolute values against independent variables in its regression. Regression models are said to contain no heterokedasticity if the probability of significance is above the confidence level of 5% or > 0.05 and vice versa. Then it appears that Prob. Chi-Square(3) is 0.64869 which means it does not contain heterokedasticity.

**Method Breusch-Pagan**

<table>
<thead>
<tr>
<th>Breusch-Pagan / Cook-Weisberg test for heteroskedasticity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ho: Constant variance</td>
</tr>
<tr>
<td>Variables: fitted values of LNJII</td>
</tr>
<tr>
<td>chi2(1) = 0.97</td>
</tr>
<tr>
<td>Prob &gt; chi2 = 0.3250</td>
</tr>
</tbody>
</table>
The Breusch-Pagan Godfrey test is a test to see heteroscedasticity in a regression model, which is a refinement of the Goldfeld-Quandt test. The G-Q test has a good ability to be used on small samples while the B-P-G test can be used well for large samples (Winarno, 2009). If the probability value of significance is more than 0.05 then it can be said that heteroscedasticity does not occur. Vice versa, if the probability value of significance is smaller than 0.05 then it can be said that there is heteroscedasticity. Then it appears that Prob. Chi-Square(3) of 0.3250 which means it does not contain heteroscedasticity.

Discussion

The Effect of Return On Equity (ROE) on JII's Share Price

Based on the results of the study, the results of the analysis explain that ROE does not have a partial influence on JII's Stock Price, which is evidenced by the calculation of the t test which shows a significance of 2.44 > 0.05. The results support the results of research by Devi Yunianti and Dudi Hendaryan (2017) which states that partial Return on Equity does not have a significant effect on stock prices.

The Effect of Debt to Equity (DER) on JII's Share Price

Based on the results of the study, the results of the analysis explain that DER has a partial influence on JII's Share Price, which is evidenced by the calculation of the t test which shows a significance of -0.29 < 0.05. The results of the study support the results of Nurul Hidayah's research (2015) which states that partially Debt to Equity has a significant effect on stock prices.

The Effect of Net Profit Margin (NPM) on JII's Share Price

Based on the results of the study, the results of the analysis explain that NPM has a partial influence on JII's Share Price, which is evidenced by the calculation of the t-test which shows a significance of -3.07 < 0.05. The results of the study support the results of Nurlia's research (2015) which states that partially Net Profit Margin has a significant effect on stock prices.

The Effect of ROE, DER, and NPM on JII Share Price

Based on the results of the study, the results of the analysis explained that the data did not contract the problem of multicollinearity and did not contain heteroscedasticity, and simultaneously ROE, DER, and NPM had no influence on JII's Share Price, which was evidenced by the calculation of the F test which showed a significance of 0.1554 > 0.05. The results also showed that ROE, DER, and NPM could explain the variance of the fixed variable JII Stock Price by 57.58%.

Conclusion

Based on the results of research and discussions that have been carried out, the following conclusions are obtained: 1) The results of the analysis simultaneously there is no significant influence between the variables ROE, DER, and NPM on JII Share Price. 2) Partial test results, it is known that DER and NPM have a positive and significant effect on JII's Share Price, but for ROE it does not have a positive and significant effect.
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