The Effect of ROA, ROE, CR, DER and EVA on Stock Return of Non-Banking Companies Listed on the Lq-45 Index and Sri-Kehati Index on the Indonesia Stock Exchange 2015-2019

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Abstract
The purpose of this study is to assess empirically on the influence of financial ratios consisting of Return on Assets (ROA), Return on Equity (ROE), Current Ratio (CR), Debt to Equity Ratio (DER) and Economic Value Added (EVA) ) on Stock Return. The data used in this study is secondary data. Sample for this study chosen is purposive sampling with the purpose of obtaining the sample based on criteria. Sample for this study is non-banking companies from 39 companies registered in LQ-45 Index and 20 registered in Sri-Kehati Index in Indonesian Stock Exchange from the year 2015 to 2019. Of 20 companies in Sri-Kehati Index, 13 companies are also part of LQ-45 Index, therefore the total overall samples taken are 46 non-banking companies. The analysis model used for this study is multiple linear regression. The result of study indicated that ROA and EVA have positive influences on stock returns, but ROE and CR have negative influences. While for DER, it has no influence on stock return.

Keywords
return on assets; return on equity; current ratio; debt to equity ratio; economic value added; stock returns

I. Introduction

In investing, all Investors who play in the stock market must have a desire to get a high return (profit rate), but the high stock return has a high risk as well and stock returns are full of uncertainty which can rise or fall sharply suddenly. Uncertainty in determining stock returns is strongly influenced by fluctuations in stock prices that can go up and down very quickly. According to Hadi (2013) “The higher the return offered by a security instrument, the higher the risk content in the security concerned (high return high risk).”.

Several researchers have examined whether the variables ROA, ROE, CR, DER and EVA can affect stock returns or not, and the results are very diverse. For ROA, ROE, CR and DER, according to Choiruurodin (2018), stock returns are positively influenced by the variables ROE, CR, DER. According to Gunadi and Wijaya (2015), ROA has a positive effect and DER does not have a significant effect. Irawan (2021) argues that ROE and EVA have no effect and DER has an effect. Arnova (2016) concludes that there is a positive effect for ROA and EVA. Dewi and Rahyuda (2016) stated that DER had an insignificant negative effect, EVA had a positive and insignificant effect, ROA had a positive and significant effect. Kurnia (2018) states that EVA and ROA have a positive and significant effect. Malinggato, Taroreh and Rumokoy (2018) state that CR and DER have no effect, while ROE has a positive and significant effect. Dura and Vionitasari (2020), stated that ROE, DER and CR
had no effect. Mariyani (2017) states that ROE and DER have no effect. Supriantikasari and Utami (2019), concluded that ROA, DER, and CR have no effect. According to the results of previous studies, which are very diverse, and each researcher has different conclusions from one another. Seeing this, therefore the authors feel compelled to examine the variables ROA, ROE, CR, DER and EVA to analyze whether or not there is an effect on changes in stock returns. Mariyani (2017) states that ROE and DER have no effect. Supriantikasari and Utami (2019), concluded that ROA, DER, and CR have no effect. According to the results of previous studies, which are very diverse, and each researcher has different conclusions from one another. Seeing this, therefore the authors feel compelled to examine the variables ROA, ROE, CR, DER and EVA to analyze whether or not there is an influence on changes in stock returns. Mariyani (2017) states that ROE and DER have no effect. Supriantikasari and Utami (2019), concluded that ROA, DER, and CR have no effect. According to the results of previous studies, which are very diverse, and each researcher has different conclusions from one another. Seeing this, therefore the authors feel compelled to examine the variables ROA, ROE, CR, DER and EVA to analyze whether or not there is an influence on changes in stock returns.

The author takes the object of his research, namely non-banking companies listed on the LQ-45 Index and the Sri-Kehati Index on the Indonesia Stock Exchange in 2015 – 2019. The LQ-45 index is an index for blue chip stocks and their trading is the most liquid. The Sri-Kehati Index is based on Sustainable Responsible Investment (SRI) and ESG (Environmental, Social and Good Governance) as its reference. Based on this, the title proposed by the author: "The Influence of ROA, ROE, CR, DER and EVA on Stock Returns of Non-Banking Companies Listed on the LQ-45 Index and Sri-Kehati Index on the Indonesia Stock Exchange in 2015-2019".

According to the explanation on the previous pages, the author tries to summarize the research problem: Is the stock return of non-banking companies listed on the LQ-45 Index and the Sri-Kehati Index on the Indonesia Stock Exchange (IDX) in 2015-2019 influenced by the ROA variable, ROE, CR, DER and EVA?

II. Review of Literature

2.1 Return on Assets (ROA) Ratio

Hery (2015) argues that ROA is an analytical tool to find out how far the company is able to use all its assets to create profits. If the ROA value is high, then the company is assumed to have implemented good performance and asset use. Conversely, if the ROA value is low, it can be concluded that the company has not provided good performance and the utilization of assets is arguably not good. The ROA formula is Net Income/Total Assets x 100%

2.2 Return on Equity (ROE) Ratio

According to Hery (2015), ROE is used with the aim of knowing how efficient the company is in using its funds from shareholders to create profits. Meanwhile, according to Tandelilin (2010), ROE is usually calculated by net profit divided by the capital of ordinary shareholders. If the ROE value is high, then the company is assumed to have implemented good performance and use of equity. Conversely, if the ROE value is low, it can be concluded that the company has not provided good performance and the utilization of equity can be considered not good. The ROE formula is Net Income/Total Equity x 100%.
2.3 Current Ratio (CR)

Sawir (2010) argues that "Current ratio is the most commonly used measure to determine the ability to meet short-term obligations because this ratio shows how far the demands of short-term creditors are met by assets that are estimated to be cash in the same period as the maturity of the debt". If the CR number is greater, then the Short-Term Assets are greater than Short-Term Debt, and it can be assumed that the company's short-term assets are able to pay off its short-term debt when it matures. The CR formula is Current Assets/Current Liabilities x 100%.

The debt policy is a policy to determine the funds of each company that comes from external sources. Managers in each company can pay attention to the risks of using debt in determining the proportion of debt appropriately in order to increase the value of the company. However, in fact there is disruption and inconsistency of debt policy resulting in a decrease in the value of the company so that the statement where the debt policy can increase the value of a company is not as expected. (Afiezen, A. et al. 2020)

2.4 Debt to Equity Ratio (DER)

DER principally reflects the amount of financing proportionally between the total debt and the company's total capital. Harahap (2010) argues, if the results of this DER are getting smaller, it means that it is good because the company does not have a large amount of debt and the company is not burdened with interest expenses which in turn can reduce profits. According to Raharjo and Muid (2013), DER is a financial ratio used with the aim of measuring the use of debt to company equity. The DER formula is Total Debt/Total Equity x 100%.

2.5 Economic Value Added (EVA)

This EVA method was initiated by Stern Stewart & Co in 1993 for the first time. Riyanto (2007) argues, in principle, EVA is defined as net operating profit after tax minus the cost of capital in order to create profits. The EVA formula is:

\[
EVA = \text{NOPAT} - (\text{WACC} \times (\text{Invested Capital}))
\]

\[
\text{NOPAT} = \text{Net Operating Profit after Tax}; \quad \text{WACC} = \text{Weighted Average Cost of Capital}; \quad \text{Invested Capital} = \text{Total Assets} - \text{Current Liabilities}
\]

If EVA > 0, it can be concluded that there is an indication where the company has good financial performance. If EVA = 0, then the value of EVA is at the break-even point, which is an indication that there is no excess profit in the company to be able to add economic added value. And if EVA < 0, it can be interpreted that there is an indication where the company has poor financial performance.

2.6 Return Share

According to Gumanti (2011), stock return is the rate of return or return of an investment which is measured as the total profit or loss received by investors during a certain period. Return stock is calculated by the formula is (Pt - Pt-1) / Pt-1

Information:
Pt : current period stock price
Pt-1 : stock price of the previous period
2.7 Framework
The author formulates the framework of thought as follows:

![Figure 1. Framework]

2.8 Hypothesis
In this study, the authors formulate a hypothesis that is in accordance with the theoretical framework that has been made. The hypothesis was tested with the aim of knowing whether or not there was an effect of all independent variables (ROA, ROE, CR, DER and EVA) on the dependent variable (Stock Return) as follows:

H1. is return the shares of companies that are on the LQ-45 Index and the Sri-Kehati Index on the IDX in 2015 – 2019 are affected by the ROA variable?

H2. Is return the shares of companies that are on the LQ-45 Index and the Sri-Kehati Index on the IDX in 2015 – 2019 are affected by the ROE variable?

H3. is return the shares of companies that are on the LQ-45 Index and the Sri-Kehati Index on the IDX in 2015 – 2019 are influenced by the CR variable?

H4. is return the shares of companies that are on the LQ-45 Index and the Sri-Kehati Index on the IDX in 2015 – 2019 are affected by the DER variable?

H5. is return the shares of companies that are on the LQ-45 Index and the Sri-Kehati Index on the IDX in 2015 – 2019 are influenced by the EVA variable?

III. Research Methods

3.1 Research Methods
In this study, the authors use panel data regression analysis which consists of time series data and also cross-sectional data, where the independent variable is regressed to the dependent variable, namely stock returns. The author chooses the independent variables using the Profitability Ratio where the authors choose from this ratio for this study are the Return on Assets Ratio (ROA) and Return on Equity Ratio (ROE). As for the Liquidity Ratio, the Current Ratio (CR) is selected and the Solvency Ratio is the Debt to Equity Ratio (DER) and Economic Value Added (EVA). In short, ROA, ROE, CR, DER, and EVA act as independent variables. Meanwhile, stock return is the dependent variable. The multiple linear regression models in this study are:
Return\ Stock = + 1 ROA\ it + 2 ROE\ it + \beta 3\ CR\ it + 4 DER\ it + 5\ EVA\ it + \\
\varepsilon\ it \ldots \text{(Equation 3.1)}

Where:

\begin{align*}
Y & = \text{Return Stock (Independent Variable)} \\
N & = \text{Number of observations} \\
T & = \text{Amount of time} \\
I - \beta 5 & = \text{Regression coefficient} \\
\epsilon & = \text{Error} \\
I & = 1, 2, 3 \ldots N \\
t & = 1, 2, 3 \ldots T
\end{align*}

This study takes non-banking companies that are on the LQ-45 Index for the period February 2021 to July 2021 and the Sri Kehati Index for the period November 2019 to April 2020. For this study, the authors use financial statement data from public companies obtained from the Indonesia Stock Exchange website and the Company's website from the 2015 to 2019 period.

3.2 Operationalization of Research Variables

Operationalization of variables aims to explain about all the variables taken in this study so that it is easy to understand.

a. Stock Returns

Return stock is the difference between the selling price or the current price with the purchase price or the beginning of the period. Hartono (2014) argues that stock returns are reciprocal from investments made by investors or shareholders in the form of profits obtained from buying and selling shares in the capital market. The formula is as follows:

\[ R_{\text{Stock returns}} = \frac{P_t - P_{t-1}}{P_{t-1}} \]

Information:

Pt : current period stock price
Pt−1 : stock price of the previous period

b. Return on Assets (ROA)

According to Hery (2015), ROA is a financial ratio that aims to find out how capable the company is in using all its assets to create profits. If the value of this ratio is higher, it means that the company has been able to use its assets in creating net income, thus making the company more attractive to investors. The ROA formula is Net Income/Total Assets x 100%

c. Return on Equity (ROE)

According to Hery (2015) that ROE is a financial ratio that aims to determine the level of efficiency in using funds from shareholders to create profits or profits. The ROE formula is Net Income/Total Equity x 100%.

d. Current Ratio (CR)

According to Sawir (2010) that CR is a financial ratio to find out how capable the company is in paying off its current debt, because this ratio will explain how quickly the company’s assets can be exchanged or converted into cash where the conversion time is the same as the deadline for paying short-term debt. The CR formula is Current Assets/Current Liabilities x 100%
e. Debt to Equity Ratio (DER)
Raharjo and Muid (2013) argue, DER is a ratio that aims to determine the level of use of debt to equity. If the DER number obtained is higher, it means that it can be concluded that the company's capital structure uses debt more than equity. Conversely, the smaller the DER number, it means that the company uses more equity than debt. The DER formula is Total Debt/Total Equity x 100%.

f. Economic Value Added (EVA)
Rudianto (2013) argues that EVA is a tool to determine the financial performance of a particular company based on the value of an item to get additional economic value. The formula is as follows
\[ EVA = NOPAT - (WACC \times Invested\ Capital) \]
\[ NOPAT = Net\ Operating\ Profit\ After\ Tax;\ WACC = Weighted\ Average\ Cost\ of\ Capital;\ Invested\ Capital = Total\ Assets - Current\ Liabilities \]

3.3 Population and Sample
a. Population
Regarding population, Sekaran and Bougie (2016) argue that, in principle, the population includes a group of people, events, or some things that are of interest and taken by researchers to be analyzed and examined further. The population is taken from several companies that are not from the banking industry listed on the Indonesia Stock Exchange, which are listed in the LQ-45 Index and the Sri-Kehati Index. The number of companies in the LQ-45 Index and the Sri-Kehati Index are 39 companies and 7 companies, or 46 companies in total.

b. Sample
The sample method used is purposive sampling method. Purposive sampling method is one way of taking samples based on certain determinations or parameters that have been determined. The criteria for this research are:
1. Non-banking companies that are in the LQ-45 Index and the Sri-Kehati Index.
3. Companies that were not excluded from the IDX during 2015 to 2019.

c. Sources and Data Collection Techniques
The source of the data comes from the financial statements of non-banking companies that have been audited and those in the LQ-45 Index and the Sri-Kehati Index. In terms of data collection techniques, the author uses documentation, which is downloaded from the Indonesia Stock Exchange website, namely: http://www.idx.co.id/ and the sites of each company.

3.4 Data Analysis Technique
The data analysis technique in this study uses multiple linear regression analysis with the aim of analyzing whether or not there is an influence of the independent variable on the dependent variable. The author uses panel data. This study uses the EViews 10 software application.

3.5 Selection of Panel Data Regression Technique
In this study, there are three tests with the aim of determining which model is the best that will be used in this study, namely:
a. **Chow Test**

This test aims to determine the best model between the Common Effect Model (CEM) and the Fixed Effect Model (FEM). CEM was selected if the chi-square cross-section probability value was > 0.05 and FEM was selected if the chi-square cross-section probability value was < 0.05.

b. **Hausman Test**

This test aims to determine the best model between FEM and Random Effect Model (REM). FEM was selected if the random cross-section probability value was < 0.05 and REM was selected if the random cross-section probability value was > 0.05.

c. **Lagrange Multiplier Test**

This test aims to determine which model is the best between REM and CEM. REM is selected if the probability value of Both < 0.05 and CEM is selected if the probability value of Both > 0.05.

3.6 Classic Assumption Test

a. **Test Normality**

This normality test uses *Jarque-Bera* which if the probability value is > 0.05 then the data is normally distributed. If the probability value is < 0.05, then the data cannot be said to be normally distributed.

b. **Multicollinearity Test**

Ghozali (2017) argues that if the relationship between two independent variables is greater than 0.90, then this can be an indication or sign that there is multicollinearity in the regression model and this is a serious problem for this study.

c. **Test Heteroscedasticity**

A model is said to be good, if the model is free from heteroscedasticity problems. If probability value < 5%, it can be concluded that there is still heteroscedasticity in the regression model. On the other hand, if the probability value is > 5%, it can be concluded that the regression model is free from heteroscedasticity. To do the test heteroscedasticity can use the Glejser Test. Ghozali (2017) argues that the Glejser test aims to regress the absolute value of the residual against the independent variable.

d. **Autocorrelation Test**

Ghozali (2017) argues that this test aims to determine whether or not there is a correlation problem in the linear regression model or the relationship between the residual error in period t and the error in the previous period t-1. This test uses Durbin Watson (DW) with the aim of detecting whether there is an autocorrelation problem or not, namely by comparing the DW values and the DW table. In the table, DW has an upper bound (dU) and a lower bound (dL).

3.7 **Hypothesis Test**

Hypothesis testing aims to determine whether to reject or accept the truth of a statement or assumption that has been made. This test includes F-test and t-test.
a. F Statistical Test (Simultaneous Significance Test)
Ghozali (2017) argues that this test is in principle to show whether all independent variables have a simultaneous influence on the dependent variable. If the probability value is < 0.05, this indicates that the independent variable simultaneously has an influence on the dependent variable and if the probability value is > 0.05, this indicates that the independent variable simultaneously has no effect on the dependent variable.

b. Coefficient of Determination Test (R-Squared)
Ghozali (2017) argues that through this test it can be seen how far the independent variable is able to explain the variation of the dependent variable.

c. Individual Parameter Significant Test (t Test)
This test aims to determine the effect of each independent variable individually on the dependent variable. The parameter set is if the probability value is < 0.05, it can be concluded that the independent variable has a significant effect on the dependent variable and if the probability value is > 0.05, it can be concluded that the independent variable has no significant effect on the dependent variable.

IV. Result and Discussion

4.1. Descriptive Statistics
Descriptive statistics aim to analyze the data by explaining the observation data, the mean, standard deviation, median, maximum and minimum values of each variable used in this study.

| Source: Data processed by the author using Software Eviews 10 |

<table>
<thead>
<tr>
<th>Parameter</th>
<th>RETURN</th>
<th>SAHAM</th>
<th>ROA</th>
<th>ROE</th>
<th>CR</th>
<th>DER</th>
<th>EVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>-0.033899</td>
<td>0.081812</td>
<td>0.176316</td>
<td>2.443272</td>
<td>0.703366</td>
<td>174954.4</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>-0.025</td>
<td>0.061675</td>
<td>0.141744</td>
<td>1.598325</td>
<td>0.500247</td>
<td>-124242.7</td>
<td></td>
</tr>
<tr>
<td>Maximum</td>
<td>0.26749</td>
<td>0.381631</td>
<td>1.399665</td>
<td>12.73088</td>
<td>12.07052</td>
<td>57749592</td>
<td></td>
</tr>
<tr>
<td>Minimum</td>
<td>-0.39433</td>
<td>-0.029306</td>
<td>-0.042079</td>
<td>0.335592</td>
<td>0.000000</td>
<td>16574091</td>
<td></td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>0.124056</td>
<td>0.072832</td>
<td>0.219939</td>
<td>2.235329</td>
<td>1.248215</td>
<td>6819920</td>
<td></td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.16</td>
<td>1.917853</td>
<td>4.262675</td>
<td>2.430452</td>
<td>7.120449</td>
<td>5.409743</td>
<td></td>
</tr>
<tr>
<td>Kurtosis</td>
<td>2.884234</td>
<td>8.030782</td>
<td>22.31135</td>
<td>9.003863</td>
<td>63.69363</td>
<td>47.68891</td>
<td></td>
</tr>
<tr>
<td>Jarque-Bera</td>
<td>0.535584</td>
<td>185.099</td>
<td>2060.945</td>
<td>275.9958</td>
<td>17975.15</td>
<td>9777.99</td>
<td></td>
</tr>
<tr>
<td>Probability</td>
<td>0.765067</td>
<td>0.000000</td>
<td>0.000000</td>
<td>0.000000</td>
<td>0.000000</td>
<td>0.000000</td>
<td></td>
</tr>
<tr>
<td>Sum Sq. Dev.</td>
<td>1.6929</td>
<td>0.583501</td>
<td>5.321072</td>
<td>549.6367</td>
<td>171.3845</td>
<td>5.12E+15</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>111</td>
<td>111</td>
<td>111</td>
<td>111</td>
<td>111</td>
<td>111</td>
<td></td>
</tr>
</tbody>
</table>

Return The highest share value of 0.26749 was held by PT Adaro Energy Tbk in 2019, while the lowest with a value of -0.039433 was owned by PT Tower Bersama Infrastructure Tbk in 2015. The average value (mean) of all samples taken was - 0.033899. The highest ROA with a value of 0.381631 was held by PT Unilever Indonesia Tbk in 2016, and the lowest at -0.029306 was held by PT Merdeka Copper Gold Tbk in 2016. The mean value of all samples taken was 0.081812. The highest ROE with a value of 1.399665 was held by PT Unilever Indonesia Tbk in 2019, and PT Medco Energi Internasional Tbk occupied the lowest position with a value of -0.042079 for its ROE in 2015. The mean value of all samples taken was 0.176316.

The highest CR with a value of 12.73088 was achieved by PT XL Axiata Tbk in 2015, but PT Mitra Keluarga Karyasehat Tbk in 2015 occupied the last position at 0.335592. The
average value of all samples taken is 2.443272. The highest DER with a value of 12,07052
was achieved by PT Tower Bersama Infrastructure Tbk in 2015, while the lowest value was
0.000000 which was held by PT Ace Hardware Indonesia Tbk in 2019. The mean value of all
samples taken was 0.703366. The highest EVA with a value of 57749592 was achieved by
PT Adaro Energy Tbk in 2019, while the lowest was -16574091 which was owned by PT
Adhi Karya (Persero) Tbk in 2019. The mean value of all samples taken was 174954.4.

4.2. Selection of Regression Model

Three tests in selecting the regression model are: Chow test, Hausman test and Lagrange Multiplier test.

a. Chow Test

After doing this test the result is FEM. The Chi-square probability value is 0.0749, where the value is > 5% so that the CEM model is the best and chosen. After the Chow test, it is necessary to carry out further Hausman test to ensure whether the CEM model remains the best model or not.

Redundant Fixed Effects Tests
Equation: MODEL_FEM
Test cross-section fixed effects

<table>
<thead>
<tr>
<th>Effects Test</th>
<th>Statistic</th>
<th>d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section F</td>
<td>0.967387</td>
<td>(43,62)</td>
<td>0.5400</td>
</tr>
<tr>
<td>Cross-section Chi-square</td>
<td>56.985193</td>
<td>43</td>
<td>0.0749</td>
</tr>
</tbody>
</table>

b. Hausman Test

The random cross-section probability value is 0.1187 > 5% so that REM is the best model and further Lagrange Multiplier testing needs to be done to ensure that REM remains the best model.

Correlated Random Effects - Hausman Test
Equation: MODEL_REM
Test cross-section random effects

<table>
<thead>
<tr>
<th>Test Summary</th>
<th>Chi-Sq. Statistic</th>
<th>Chi-Sq. d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section random</td>
<td>8.767567</td>
<td>5</td>
<td>0.1187</td>
</tr>
</tbody>
</table>

c. Lagrange Multiplier Test

The Breusch-Pagan value for the cross-section is 3.195179 with a probability value of both 0.0005 where < 5% so that the REM model is the best model for this test.

<table>
<thead>
<tr>
<th>Null (no rand. effect)</th>
<th>Cross-section</th>
<th>Period</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternative</td>
<td>One-sided</td>
<td>One-sided</td>
<td></td>
</tr>
<tr>
<td>Breusch-Pagan</td>
<td>3.195179</td>
<td>8.763355</td>
<td>11.95853</td>
</tr>
<tr>
<td></td>
<td>(0.0739)</td>
<td>(0.0031)</td>
<td>(0.0005)</td>
</tr>
<tr>
<td>Honda</td>
<td>-1.787506</td>
<td>2.960296</td>
<td>0.829288</td>
</tr>
<tr>
<td></td>
<td>(0.9631)</td>
<td>(0.0015)</td>
<td>(0.2035)</td>
</tr>
<tr>
<td>King-Wu</td>
<td>-1.787506</td>
<td>2.960296</td>
<td>2.306341</td>
</tr>
<tr>
<td></td>
<td>(0.9631)</td>
<td>(0.0015)</td>
<td>(0.0105)</td>
</tr>
<tr>
<td>GHM</td>
<td>--</td>
<td>--</td>
<td>8.763355</td>
</tr>
<tr>
<td></td>
<td>--</td>
<td>--</td>
<td>(0.0047)</td>
</tr>
</tbody>
</table>

After three tests, REM was chosen as the best model to use.
4.3. Classic Assumption Test Results

a. Normality Test
The table below explains that the probability value of 0.10607 is greater than 5%, it can be interpreted that the data is normally distributed.

b. Multicollinearity Test
Based on the table below, there is no value that exceeds 0.9 among the independent variables, so there is no multicollinearity problem in this study.

c. Heteroscedasticity Test
All independent variables as described in the table below, namely ROA, ROE, CR, DER and EVA have probability values of 0.6154, 0.8004, 0.8661, 0.8511, and 0.4621, all of which are > 0.05. It can be concluded that there is no heteroscedasticity problem.

d. Autocorrelation Test
According to the test results as shown in the table below, the DW figure of 2.155649 is rounded up to 2.1556.

The test results conclude that there are no positive or negative autocorrelation problems.
<table>
<thead>
<tr>
<th>Hipotesis Nol</th>
<th>Keputusan</th>
<th>Jika</th>
<th>Hasil Akhir Pengujian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tidak ada autokorelasi positif</td>
<td>Tolak</td>
<td>0 &lt; (dw) &lt; (dL)</td>
<td>(dw (2.1556) &gt; dL (1.5977))</td>
</tr>
<tr>
<td>Tidak ada autokorelasi positif</td>
<td>Tolak Ada Keputusan</td>
<td>(dL \leq dw \leq dU)</td>
<td>(dl (1.5977) \leq dl (1.7855) \leq dw (2.1556))</td>
</tr>
<tr>
<td>Tidak ada autokorelasi negatif</td>
<td>Tolak</td>
<td>4 - (dL) &lt; (dw) &lt; 4</td>
<td>(dw (2.1556) &lt; 4 - dl (2.4023) &lt; 4)</td>
</tr>
<tr>
<td>Tidak ada autokorelasi negatif</td>
<td>Tolak Ada Keputusan</td>
<td>4 - (dL) &lt; (dw) &lt; 4 - (dU)</td>
<td>(dw (2.1556) &lt; 4 - dl (2.2145) &lt; 4 - dl (2.4023))</td>
</tr>
<tr>
<td>Tidak ada autokorelasi positif atau negatif</td>
<td>Tidak Ditolak</td>
<td>(dL \leq dw \leq dU)</td>
<td>(dL (1.5977) \leq dw (2.1556) \leq dU (1.7855))</td>
</tr>
</tbody>
</table>

### 4.4. Hypothesis Testing

This test includes two tests consisting of the F test and t test.

- **Dependent Variable:** RETURNSAHAM
- **Method:** Panel EGLS (Cross-section random effects)
- **Date:** 07/14/21   **Time:** 09:33
- **Sample:** 2015 2019
- **Periods included:** 5
- **Cross-sections included:** 44
- **Total panel (unbalanced) observations:** 111
- **Swamy and Arora estimator of component variances**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>1.194450</td>
<td>0.382463</td>
<td>3.123044</td>
<td>0.0023</td>
</tr>
<tr>
<td>ROE</td>
<td>-0.273954</td>
<td>0.120175</td>
<td>-2.279629</td>
<td>0.0247</td>
</tr>
<tr>
<td>CR</td>
<td>-0.012830</td>
<td>0.005831</td>
<td>-2.200351</td>
<td>0.0300</td>
</tr>
<tr>
<td>DER</td>
<td>-0.020700</td>
<td>0.011414</td>
<td>-1.813608</td>
<td>0.0726</td>
</tr>
<tr>
<td>EVA</td>
<td>4.84E-09</td>
<td>1.47E-09</td>
<td>3.290732</td>
<td>0.0014</td>
</tr>
<tr>
<td>C</td>
<td>-0.038256</td>
<td>0.019449</td>
<td>-1.966982</td>
<td>0.0518</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Effects Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>S.D.</strong></td>
</tr>
<tr>
<td>Cross-section random</td>
</tr>
<tr>
<td>Idiosyncratic random</td>
</tr>
</tbody>
</table>

### Weighted Statistics

- **R-squared:** 0.379211
- **Adjusted R-squared:** 0.349649
- **S.E. of regression:** 0.100044
- **F-statistic:** 12.82789
- **Prob(F-statistic):** 0.000000
- **Mean dependent var:** -0.033899
- **S.D. dependent var:** 0.124056
- **Durbin-Watson stat:** 2.175927
- **Sum squared resid:** 1.050935
- **Durbin-Watson stat:** 2.175927

### Unweighted Statistics

- **R-squared:** 0.379211
- **Mean dependent var:** -0.033899
- **Durbin-Watson stat:** 2.175927

#### a. Simultaneous Significance Test (F Test)

The probability value (F-statistic) is 0.000000 <0.05, this means that all the independent variables contained in this study together have an influence on the dependent variable, namely stock returns.

#### b. Coefficient of Determination Test (R-squared)

The R-Squared value is 0.379211 or 37.92%, which shows that the independent variables in this study, namely ROA, ROE, CR, DR and EVA have affected 37.92% of the proportion of the dependent variable, namely stock returns. While the remaining 62.08% is influenced by other variables not included in this study.

#### c. Individual Parameter Significance Test (t Test)

The independent variables consisting of ROA, ROE, CR and EVA have probability values of 0.0023, 0.0247, 0.0300 and 0.0014, all of which are smaller than the 5% significance level, so this can be interpreted that the independent variables ROA, ROE, CR and EVA each have an influence on the dependent variable, namely stock returns. However,
for DER which is also an independent variable, the probability value is 0.0726 which is greater than the 5% significance level, so it can be concluded that DER has no effect on the dependent variable.

4.5. Discussion of Hypothesis Testing

a. Effect of Return on Assets (ROA) on Stock Return
ROA has a t-statistic value of 3.123044 and a probability value of 0.0023 <0.05 where it can be concluded that ROA has a positive effect on the dependent variable. The results of this study are in accordance with the results of research conducted by Gilang and Wijaya (2015), Arnova (2016), Dewi and Rahyuda (2016), Novianti (2018) which explains that ROA has a positive influence on the dependent variable and according to Supriantikasari and Utami (2019) concludes that ROA has no effect on the dependent variable. The more assets that are utilized in order to create company profits, the profit generated will be higher as well, so that investors will be able to provide more value to their share prices. As a result, the company's stock price will increase and ultimately stock returns will also increase.

b. Effect of Return on Equity (ROE) on Stock Return
ROE has a t-statistic value of -2.279629 and a probability value of 0.0247 <0.05 it means that ROE has a negative effect on the dependent variable, it can be interpreted that ROE has a relationship in the opposite direction to the dependent variable. The results of this study are in accordance with the results of research conducted by Choirurodin (2018) and Malinggato, Taroreh and Rumokoy (2018) argue that ROE has a positive influence on stock returns and while research conducted by Irawan (2021), Dura dan Vionitasari (2020) and Mariyani (2017) argue that ROE has no effect. The more interested investors are in these shares, investors are willing to pay a higher share price, because the company they buy shares in can provide a high enough ROE value, so as a result, the company's share price is higher than before. Sometimes the stock price is opposite to ROE, this is because when the company takes corporate action by seeking funding by issuing new shares or rights issue because even though the proceeds of the funding are used to buy productive assets to generate profits, but if existing shareholders (Existing Shareholders) does not participate in buying the new shares, the ownership will be diluted. With diluted ownership, the veto will also be lost.

c. Effect of Current Ratio (CR) on Stock Return
CR has a t-statistic value of -2.200351 and a probability value of 0.0300 <0.05 means that CR has a negative effect on the dependent variable. Choirurodin (2018) states that CR has a positive influence. Otherwise, Malinggato, Taroreh and Rumokoy (2018), Dura dan Vionitasari (2020) and Supriantikasari and Utami (2019), stated that CR had no influence. according to Sawir (2015), a low CR will be able to cause stock prices to decline, but a too high CR also cannot be interpreted as good, because there are indications that a lot of cash or cash is not used for business development or little activity, so that later it can reduce profits. As a result, investors are not interested in companies that have non-current receivables even though the amount of receivables is quite large or inventories that do not turn over quickly or sell for a long time, so that the stock price can decrease even though the CR is high. If the stock price decreases, the stock return will also decrease.

d. Effect of Debt to Equity Ratio (DER) on Stock Return
From the table above, DER has a t-statistic value of -1.813608 and a probability value of 0.0726 > 0.05 means that DER has no effect on the dependent variable. Choirurodin (2018), Gilang and Wijaya (2015) and Irawan (2021) also state the same thing if DER has a positive
influence on stock returns. On the other hand, Dewi and Rahyuda (2016) stated that DER did not have a negative effect. Meanwhile, according to Malinggato, Taroreh and Rumokoy (2018), Dura and Vionitasari (2020), Mariyani (2017) and Supriantikasari and Utami (2019), they argue that DER has no effect. The higher the DER, the risk of default (default risk) so that it can lower the company's stock price and ultimately lower the value of the company. But sometimes investors also see that as long as the debt used is productive debt, in the sense that this debt is used to buy productive assets so that it can bring in income in the future, investors see this as a good thing because this debt is to provide growth to the company by bringing in future income. Therefore, sometimes DER does not affect stock prices which in the end also does not affect stock returns.

e. Effect of Economic Value Added (EVA) on Stock Return

The table above shows that EVA has a t-statistic value of 3.290732 and a probability value of 0.0014 <0.05 meaning that EVA has a positive effect on the dependent variable. Iwin Arnova (2016), Dewi and Rahyuda (2016) and Novianti (2018) explain that EVA has a positive influence. On the contrary, Irawan (2021), according to his research that EVA has no effect. This study explains that EVA has an influence on stock returns. It can be concluded that investors also use EVA as an indicator to assess whether the company is healthy or not, which in turn will affect stock prices and also stock returns.

V. Conclusion

After analyzing and discussing this research, conclusions can be drawn as follows:

- Individually, ROA and EVA have a positive effect, while ROE and CR have a negative effect on stock returns of non-banking companies on the LQ-45 Index and the Sri-Kehati Index on the IDX in 2015-2019, while DER has no effect on stock returns of non-banking companies in the LQ-45 Index and the Sri-Kehati Index on the IDX in 2015-2019.

Suggestion

The advice that can be given is that investors should pay attention to variables that can affect stock returns and for further research it is better to add other variables that may have an influence on stock returns, namely ROA, ROE, CR, DER and EVA.

References


Eduardus Tandelilin, (2007), Analisis Investasi dan Manajemen Portofolio, BPFE UGM, Yogyakarta