ANALYSIS OF FACTORS AFFECTING FIRM VALUE IN PLANTATION COMPANIES LISTED ON BEI WITH PROFITABILITY AS AN INTERVENING VARIABLE

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Abstract: The purpose of this study is to determine and test the factors that affect firm value in plantation companies listed on the Indonesia Stock Exchange and to examine the factors that affect firm value through profitability as an intervening variable. The factors tested in this study are capital structure, liquidity, total asset turnover, inventory turnover, CSR disclosure. This research uses secondary data. The population in this study is plantation companies listed on the IDX. The sample of this research is 10 companies for the period 2012-2016. The analytical tool used in this study is to use multiple linear regression analysis and path analysis with the help of SPSS. Simultaneous analysis results that capital structure, liquidity, total asset turnover, inventory turnover and CSR disclosure and profitability have a significant effect on firm value. Partially, capital structure and liquidity have a negative and significant effect on firm value, total asset turnover has a positive and significant effect on firm value, inventory turnover and CSR disclosure has a negative and not significant effect on firm value. The profitability variable is a significant intervening variable for the total assets turnover and inventory turnover variables to the firm value, and is an insignificant intervening variable in the relationship of capital structure, liquidity and CSR disclosure to the firm value.

1. INTRODUCTION

Indonesia has become an agrarian country because it is endowed with high rainfall so that many people make a living in farming. Therefore, Indonesia was chosen as a plantation area because it was included in a tropical country that was suitable for plantation land. Plantation is a renewal of the agricultural economic system that provides change for developing countries like Indonesia. Investment in the plantation sector in Indonesia requires substantial funds so that management must pay attention to the capital structure within the company. If the plantation company has an optimal capital structure, it will help to improve the company's performance. The company's financial position is very influential on the ratio of own capital to loan capital. To develop a business using large capital, it is necessary to not only own capital but also loan capital.

Liquidity within the company is an important aspect because it shows the ability of the company in order to pay off short-term obligations when due. A company with a high level of liquidity will trigger an opportunity for a company to grow. The higher the level of company liquidity will attract the attention of investors to invest in the company.

In the company's operational activities, investment is needed, namely assets that are long-term and short-term assets. To measure the intensity of a company in using its assets, namely the Total Asset Turnover (TATO). The higher the total assets
turnover, the more efficient the company is in using its assets so that it will limit the company in buying new assets.

A company has a good performance if the company is fast in selling its inventory accompanied by sufficient profit. Low inventory turnover will illustrate that the company has weak sales and excessive inventory. Having a high inventory turnover will increase company revenue.

Profitability is important for the development and survival of the company. Companies that have good performance for the company will produce high profitability. Plantation companies with high profitability will attract investors because it shows the ability to provide high profits to their owners.

One of the goals of the company is to maximize firm value. Firm value is the value of the firm’s stock market that reflects the owner’s wealth. Investors will be more interested in investing in plantation companies with maximum firm value because it can provide prosperity to shareholders if the share price rises.

In this era of globalization, business people are expected to not only prioritize profits from their business fields, but must be accompanied by responsibilities towards their social environment. Therefore, Corporate Social Responsibility is one of the important factors in a company. Previously CSR disclosures were voluntary reports made by companies. However, for today, the government is increasingly aware of the benefits and importance of CSR disclosure due to the large amount of environmental damage caused by the company's operational activities. With the financial statements that are equipped with CSR disclosures, it will attract investors in assessing return and risk.

The purpose of this study was to examine the effect of capital structure, liquidity, total asset turnover, inventory turnover, CSR disclosure on firm value with profitability as an intervening variable.

2. LITERATURE REVIEW

2.1 Capital Structure

Capital structure is important in the decision making process of spending that will be carried out by the company. To measure the capital structure in this study using the debt to equity ratio with the following formula:

\[
Debt \ To \ Equity \ Ratio = \frac{Total \ Liabilities}{Equity} \times 100\%
\]

2.2 Liquidity

Liquidity is the company’s ability to meet obligations / debts that must be immediately paid with current debt. According to Riyanto (2008) states that liquidity is a problem related to the problem. In this study, to measure liquidity the current ratio is used with the following formula:

\[
Current \ Ratio = \frac{Current \ Assets}{Current \ Liabilities}
\]

2.3 Total Asset Turnover

According to Syamsuddin (2009), the ratio of total asset turnover is a ratio that shows the level of efficiency of the use of all company assets in generating certain sales volumes. The formula of total asset turnover is:

\[
Total \ Asset \ Turnover \ Ratio = \frac{Sales}{Total \ Asset}
\]
2.4 Inventory Turnover

Inventory turnover ratio describes the company's liquidity, namely by measuring the efficiency of the company in managing and selling inventory owned by the company. The formula of inventory turnover is as follows:

\[
\text{Inventory Turnover Ratio} = \frac{Sales}{Average \text{ Inventory}}
\]

2.5 Corporate Social Responsibility Disclosure

Corporate Social Responsibility (CSR) is an action taken by the company as a sense of responsibility towards the social and the environment in which the company is located. CSR disclosure in this study uses the Corporate Social Responsibility Disclosure Index (CSRDI) measured by the formula:

\[
\text{Corporate Social Responsibility Disclosure Index} = \frac{\sum X_j}{N_j}
\]

Xj = value 1 if an item is disclosed, value 0 if not
Nj = number of items disclosed in a company

2.6 Firm Value

According to Sartono (2010: 487), firm value is the sale value of a firm as a business that is operating. Measurement of firm value in this study uses Price Earning Ratio with the following formula:

\[
\text{Price Earning Ratio} = \frac{Market \text{ Value Per Share}}{Earning \text{ Per Share}}
\]

2.7 Profitability

Profitability is one measurement of performance within the company. Profitability in a company shows the company's ability to generate profits for a certain period. In this study, the ratio used to measure profitability is return on investment (ROI) with the following formula:

\[
ROI = \frac{Net \text{ Income} + Interest}{Value \text{ of Asset or Investment}}
\]

2.8 Hypothesis

The hypothesis that can be taken from the conceptual framework in Figure I is as follows:

H1: Capital structure has a negative effect on profitability
H2: Liquidity has a positive effect on profitability
H3: Total Asset Turnover has a negative effect on profitability
H4: Inventory Turnover has a positive effect on profitability
H5: CSR disclosure has a negative effect on profitability
H6: Profitability has a positive effect on firm value
H7: Capital structure has a negative effect on firm value
H8: Liquidity has a positive effect on company value
H9: Total Asset Turnover has a positive effect on firm value
H10: Inventory Turnover has a positive effect on firm value
H11: CSR disclosure has a positive effect on company value

3. METHOD

This research is a comparative causal research that is research with the characteristics of problems in the form of a causal relationship between two or more
variables. The population used in this research is plantation companies listed on the Indonesia Stock Exchange, as many as 16 companies. Sample selection by purposive sampling with the following criteria:

1. Plantation companies that were listed on the Indonesia Stock Exchange during the 2012-2016 period and were registered before 2012
2. Plantation companies that did not experience delisting during the study period.
3. Plantation companies that have published financial statements during the study period.

Based on these criteria, a sample of 10 companies was obtained for 5 years with a total of 50 examined data. Data analysis methods in this study used descriptive statistics, classic assumption tests and path analysis. The regression equation found in the path analysis is as follows:

\[ Z = \alpha_1 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e_1 \]
\[ Y_2 = \alpha_2 + \beta_6 X_1 + \beta_7 X_2 + \beta_8 X_3 + \beta_9 X_4 + \beta_{10} X_5 + \beta_{11} Z + e_2 \]

\( Z \) = Profitability (Return On Investment)
\( Y_2 \) = Company Value (Price Earning Ratio)
\( X_1 \) = Capital Structure (Debt to Equity Ratio)
\( X_2 \) = Liquidity (Current Ratio)
\( X_3 \) = Total Asset Turnover Ratio
\( X_4 \) = Inventory Turnover Ratio
\( X_5 \) = Corporate Social Responsibility Disclosure Index (CSRDI)
\( \alpha_{1,2} \) = Constant
\( \beta_{1...10} \) = Multiple Linear Regression Coefficient
\( e_{1,2} \) = Error Value (Residue)

4. RESULT AND DISCUSSION
4.1 Result
Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>DER (X1)</td>
<td>0.2</td>
<td>11.27</td>
<td>1.59</td>
<td>1.8587</td>
</tr>
<tr>
<td>CR (X2)</td>
<td>0.1</td>
<td>3.27</td>
<td>1.0616</td>
<td>0.6526</td>
</tr>
<tr>
<td>TATO (X3)</td>
<td>0.1</td>
<td>1.69</td>
<td>0.5544</td>
<td>0.442</td>
</tr>
<tr>
<td>ITN (X4)</td>
<td>3.5</td>
<td>28.42</td>
<td>10.771</td>
<td>4.8432</td>
</tr>
<tr>
<td>CSRDI (X5)</td>
<td>0.0633</td>
<td>0.7342</td>
<td>0.2633</td>
<td>0.1702</td>
</tr>
<tr>
<td>ROI (Z)</td>
<td>-0.44</td>
<td>0.2</td>
<td>0.0272</td>
<td>0.0918</td>
</tr>
<tr>
<td>PER (Y)</td>
<td>-73.33</td>
<td>44.05</td>
<td>9.6364</td>
<td>18.7682</td>
</tr>
</tbody>
</table>

Classical Assumption Test
Normality Test

Test normality for residuals using the Kolmogorov-Smirnov test. The level of significance used \( \alpha = 0.05 \). Significance in the normality test in the study is 0.971 > 0.05. Therefore it can be concluded that the data is normally distributed.
Multicollinearity Test

To check whether multicollinearity occurs in the study or not, it can be seen from the value of the variance inflation factor (VIF). VIF values greater than 10 are indicated that an independent variable has multicollinearity. The results of the VIF study <10, which means that in this study multicollinearity did not occur.

Heteroscedasticity Test

To detect the presence or absence of heteroscedasticity can be done by looking at the presence or absence of certain patterns on the scatter plot graph between SRESID on the Y axis, and ZPRED on the X axis (Ghozali, 2013). In this study, there is no clear pattern, and the points spread above and below the number 0 on the Y axis, then in this study there was no heteroscedasticity.

Autocorrelation Test

The autocorrelation test in this study used the Durbin-Watson test. The value of the Durbin-Watson statistics is 2.304. The Durbin-Watson statistical value lies between 1 and 3, namely 1 <2,304 <3, then the non-autocorrelation assumption is fulfilled. In other words, autocorrelation symptoms did not occur in this study.

Hypothesis testing

First Path Hypothesis Test

**Table 2. Determination Coefficient of Substructure I**

<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>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.555*</td>
<td>.308</td>
<td>.229</td>
<td>.0969415</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), CSRDI (X5), TATO (X3), ITO (X4), DER (X1), CR (X2)

The coefficient of determination (R-Square) is 0.308. This value can mean that the DER, CR, TATO, ITO, CSRDI variables are able to influence ROI of 30.8%, the remaining 69.2% is explained by other variables or factors.

**Table 3. Test F Substructure I**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>.184</td>
<td>5</td>
<td>.037</td>
<td>3.915</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>.413</td>
<td>44</td>
<td>.009</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>.597</td>
<td>49</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), CSRDI (X5), TATO (X3), ITO (X4), DER (X1), CR (X2)
b. Dependent Variable: ROI (Z)
The calculated F value is 3.915 and the Sig. is 0.005. It is known that the Sig value is 0.005 <0.05, then DER, CR, TATO, ITO, CSRDI together or simultaneously have a significant effect on ROI.

Table 4. T-test Substructure I DER, CR, TATO, ITO, CSRDI on ROI

<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></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>-.048</td>
<td>.141</td>
<td>-.338</td>
</tr>
<tr>
<td></td>
<td>DER (X1)</td>
<td>-.008</td>
<td>.034</td>
<td>-.036</td>
</tr>
<tr>
<td></td>
<td>CR (X2)</td>
<td>-.013</td>
<td>.065</td>
<td>-.035</td>
</tr>
<tr>
<td></td>
<td>TATO (X3)</td>
<td>.188</td>
<td>.054</td>
<td>.484</td>
</tr>
<tr>
<td></td>
<td>ITO (X4)</td>
<td>.050</td>
<td>.021</td>
<td>.309</td>
</tr>
<tr>
<td></td>
<td>CSRDI (X5)</td>
<td>.018</td>
<td>.094</td>
<td>.026</td>
</tr>
</tbody>
</table>

a. Dependent Variable: ROI (Z)

From table 3, the results of the substructure I path equation are as follows.

\[ Z = -0.048 - 0.008X_1 - 0.013X_2 + 0.188X_3 + 0.050X_4 + 0.018X_5 + e \]

Following is the interpretation of table IV and the above equation:

- In table 4, there is a path coefficient constant of -0.048 where if DER (X1), CR (X2), TATO (X3), ITO (X4), CSRDI (X5) variables are considered zero, then there is a decrease in profitability (ROI) of 0.048 or 4.8% in plantation companies listed on the Indonesia Stock Exchange in the period 2012-2016.
- The capital structure variable that is DER with a path coefficient of -0.008 means that every time there is an increase in the DER variable by 1%, there will be a decrease in profitability (ROI) of -0.008 or 0.8% if other variables are constant. Sig DER value is 0.825 > 0.05, it is concluded that capital structure (DER) has a negative effect on profitability (ROI) but is not significant.
- The liquidity variable is CR with a path coefficient of -0.013 meaning that every time there is an increase in the CR variable by 1%, there is a decrease in profitability (ROI) of -0.013 or 1.3% if other variables are constant. The Sig CR value is 0.847 > 0.05, so it is concluded that the liquidity variable (CR) has a negative effect on profitability (ROI), but it is not significant.
- The asset turnover variable is TATO with a path coefficient value of 0.188 which means that each increase in the TATO variable is 1%, then there is an increase in the profitability variable (ROI) of 0.188 or 18.8%. Sig TATO value is 0.001 <0.05, it is concluded that asset turnover variable (TATO) has a positive effect on profitability (ROI) and is significant.
- Inventory turnover variable, ITO, with a path coefficient value of 0.050, which means that for each increase in the ITO variable by 1%, there is an increase in the profitability variable by 5%. The Sig value of ITO is 0.023.
<0.05, so it is concluded that the inventory turnover (ITO) variable has a positive effect on profitability (ROI) and is significant.

- CSR disclosure variable, CSRDI, has a positive effect on ROI with a path coefficient value of 0.018, which means that if there is an increase in the CSRDI variable by 1%, then there is an increase in profitability variables (ROI) of 0.018 or 1.8%. The Sig value of CSRDI is 0.846 > 0.05, so it is concluded that CSR disclosure variable (CSRDI) has a positive effect on profitability (ROI) but is not significant.

Second Path Hypothesis Test

Table 5. Substructure Determination Coefficient II

<table>
<thead>
<tr>
<th>DER, CR, TATO, ITO, CSRDI, ROI of PER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model Summary</strong></td>
</tr>
<tr>
<td>Model</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

- Predictors: (Constant), ROI (Z), CSRDI (X5), DER (X1) , ITO (X4), TATO (X3), CR (X2)
- Dependent Variable: PER (Y)

Based on Table 5, it is known that the coefficient of determination (R-Square) is 0.676. This value can be interpreted as DER, CR, TATO, ITO, CSRDI, ROI variables able to influence PER by 67.6%, the remaining 32.4% is explained by other variables or factors.

Table 6. Substructure F Test II

<table>
<thead>
<tr>
<th>DER, CR, TATO, ITO, CSRDI, ROI of PER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ANOVA</strong></td>
</tr>
<tr>
<td>Model</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>Residual</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

- Predictors: (Constant), ROI (Z), CSRDI (X5), DER (X1) , ITO (X4), TATO (X3), CR (X2)
- Dependent Variable: PER (Y)

Based on Table 6, it is known that the calculated F value is 14.929 and the Sig. is 0.000. Known Sig value is 0.000 <0.05, then DER, CR, TATO, ITO, CSRDI, ROI together or simultaneously have a significant effect on PER.
Based on the results in Table 7, the results of the substructure II line equation are as follows:

\[ Y = 10,235 - 1,776X_1 - 1,923X_2 + 2,254X_3 - 0,241X_4 - 1,764X_5 - 10,683Z + e \]

Following is the interpretation of table 7 and the above equation:

- In Table 7 and the equation above it is known that the path coefficient is 10,235, which means that if there is no effect of the DER variable (X1), CR (X2), TATO (X3), ITO (X4), CSRDI (X5), ROI (Z ) equals zero, then the PER variable will remain at 10,235 for plantation companies listed on the Indonesia Stock Exchange in 2012-2016.

- The capital structure variable that is DER (X1) with a path coefficient value of 1.776 means that every DER variable increases by 1%, then there is a decrease in firm value (PER) of 1.776 or 177.6% assuming other variables are considered constant. Sig DER value is 0.000 <0.05, so it is concluded that capital structure variable (DER) has a negative and significant effect on firm value variable (PER).

- The liquidity variable, CR (X2) with a path coefficient value - 1.923, means that each increase in the CR variable is 1%, then there is a decrease in firm value (PER) of 1.923 or 192.3%, assuming other variables are considered constant. The Sig CR value is 0.005 <0.05, so it is concluded that the liquidity variable (CR) has a negative and significant effect on the firm value variable (PER).

- The variable turnover of total assets is TATO (X3) with a coefficient value of 2.254 meaning that each increase in the TATO variable by 1% then there is an increase in the firm value (PER) of 2,254 or 225.4% assuming other variables are considered constant. Sig TATO value is 0.001 <0.05, so it is concluded that the total assets turnover variable (TATO) has a positive and significant effect on firm value (PER).

- Inventory turnover variable, ITO with a path coefficient value of -0.241, means that for every increase in ITO by 1%, there is a decrease in firm value (PER) of 0.241 or 24.1%, assuming other variables are considered constant.
The Sig value of ITO is 0.287 > 0.05, so it is concluded that inventory turnover (ITO) has a negative effect and is not significant to the firm value (PER).

- The CSR disclosure variable is CSRDI with a path coefficient of -1.764 meaning that for every increase of CSRDI by 1%, there is a decrease in firm value (PER) of 1,764 or 176.4% with the assumption that other variables are considered constant. Sig CSRDI value is 0.065 > 0.05, then concluded the CSR disclosure variable (CSRDI) has a negative and not significant effect on PER.

- The profitability variable is ROI with a path coefficient value of -10.683 meaning that each increase in ROI by 1%, then there is a decrease in firm value (PER) of 10.683 or 1068.3% assuming other variables are considered constant. Sig ROI value is 0.000 < 0.05, thus it can be concluded that the profitability variable (ROI) has a negative and significant effect on firm value (PER).

Hypothesis Path Test Substrate III
To test the significance of mediation, the Sobel test can be used. In the Sobel test approach, first calculate the value of Z_sobel. Here is the Z_sobel calculation formula:

\[ Z_{sobel} = \frac{a \times b}{\sqrt{(b^2 \times s_a^2) + (a^2 \times s_b^2)}} \]

To determine the significance of the mediation relationship, the value of Z_sobel can be compared to the critical value of z with a significance level of 5%, ie \( z_{critical} = \pm 1.96 \). If \( |z_{sobel}| > |z_{critical}| \), the indirect effect or mediation is statistically significant at the 5% significance level (Preacher and Hayes, 2004).

Table 8 and Table 9 present the calculation of the direct effect, indirect effect and the calculation of the Sobel Z value.

### Table 8. Testing Indirect Effects

<table>
<thead>
<tr>
<th>Direct Effect</th>
<th>Indirect Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1 -&gt; Z</td>
<td>-0.008</td>
</tr>
<tr>
<td>X2 -&gt; Z</td>
<td>-0.013</td>
</tr>
<tr>
<td>X3 -&gt; Z</td>
<td>0.188</td>
</tr>
<tr>
<td>X4 -&gt; Z</td>
<td>0.05</td>
</tr>
<tr>
<td>X5 -&gt; Z</td>
<td>0.018</td>
</tr>
<tr>
<td>Z -&gt; Y</td>
<td>-10.683</td>
</tr>
</tbody>
</table>

### Table 9. Testing the Significance of Mediation with the Sobel Test Method

<table>
<thead>
<tr>
<th>Effect</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>Z Sobel</th>
<th>Z Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1 -&gt; Z</td>
<td>-0.008</td>
<td>0.034</td>
<td>0.235</td>
<td>1.96</td>
</tr>
<tr>
<td>X2 -&gt; Z</td>
<td>-0.013</td>
<td>0.065</td>
<td>0.200</td>
<td>1.96</td>
</tr>
<tr>
<td>X3 -&gt; Z</td>
<td>0.188</td>
<td>0.054</td>
<td>-3.129</td>
<td>1.96</td>
</tr>
<tr>
<td>X4 -&gt; Z</td>
<td>0.05</td>
<td>0.021</td>
<td>-2.259</td>
<td>1.96</td>
</tr>
<tr>
<td>X5 -&gt; Z</td>
<td>0.018</td>
<td>0.094</td>
<td>-0.191</td>
<td>1.96</td>
</tr>
<tr>
<td>Z -&gt; Y</td>
<td>-10.683</td>
<td>1.497</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Based on the results in 8 and Table 9, the results are obtained:

- The direct effect of DER on ROI is -0.008 and the direct effect of ROI on PER is -10.683. Then the indirect effect of DER on PER, through ROI is -0.008 \times -10.683 = 0.085. Here are the results of the calculation of Z_sobel for the DER variable, namely:

  \[ Z_{sobel} = \frac{-0.008 \times -10.683}{\sqrt{(-10.683^2 \times 0.034^2) + (-0.008^2 \times 1.497^2)}} \]

  Sobel Z value of 0.235 < Z table 1.96, then DER indirectly, has no significant effect on PER, through ROI. In other words, ROI does not significantly mediate the relationship between DER and PER.

- The direct effect of CR on ROI is -0.013 and the direct effect of ROI on PER is -10.683. Then the indirect effect of DER on PER, through ROI is -0.013 \times -10.683 = 0.139. Here are the results of the calculation of Z_sobel for the CR variable, namely:

  \[ Z_{sobel} = \frac{-0.013 \times -10.683}{\sqrt{(-10.683^2 \times 0.065^2) + (-0.013^2 \times 1.497^2)}} \]

  Z value of 0.200 < Z table 1.96, then CR indirectly, does not have a significant effect on PER, through ROI. In other words, ROI does not significantly mediate the relationship between CR and PER.

- The direct effect of TATO on ROI is 0.118 and the direct effect of ROI on PER is -10.683. Then the indirect effect of DER on PER, through ROI is 0.118 \times -10.683 = -2.008. Here are the results of the calculation of Z_sobel for TATO variable:

  \[ Z_{sobel} = \frac{0.188 \times -10.683}{\sqrt{(-10.683^2 \times 0.054^2) + (0.188^2 \times 1.497^2)}} \]

  Z value sobel \mid 3.129 \mid > Z table 1.96, then TATO indirectly, has a significant effect on PER, through ROI. In other words, ROI significantly mediates the relationship between TATO and PER.

- The direct effect of ITO on ROI is 0.05 and the direct effect of ROI on PER is -10.683. Then the indirect effect of DER on PER, through ROI is 0.05 \times -10.683 = -0.534. Here are the results of calculating Z_sobel for ITO:

  \[ Z_{sobel} = \frac{0.05 \times -10.683}{\sqrt{(-10.683^2 \times 0.021^2) + (0.05^2 \times 1.497^2)}} \]

  Z value sobel \mid 2.259 \mid > Z table 1.96, then ITO indirectly, has a significant effect on PER, through ROI. In other words, ROI significantly mediates the relationship between ITO and PER.

- The direct effect of CSRDI on ROI is 0.018 and the direct effect of ROI on PER is -10.683. Then the indirect effect of CSRDI on PER, through ROI is 0.018 \times -10.683 = -0.192. Following are the results of the Z_sobel calculation for the CSRDI variable:

  \[ Z_{sobel} = \frac{0.018 \times -10.683}{\sqrt{(-10.683^2 \times 0.094^2) + (0.018^2 \times 1.497^2)}} \]
Z value sobel | -0.191 | <Z table 1.96, then CSRDI indirectly, has no significant effect on PER, through ROI. In other words ROI does not significantly mediate the relationship between CSRDI and PER.

5. CONCLUSIONS AND SUGGESTIONS

5.1 Conclusions

Based on the results of data analysis and discussion, it can be concluded:

1. Based on the results of the first simultaneous test, the capital structure (Debt to Equity Ratio), liquidity (Current ratio), total asset turnover (Total Asset Turnover), inventory turnover and CSR (Corporate Social Responsibility Disclosure) disclosure significant effect on profitability (Return on Investment).

2. Based on the results of the second simultaneous test, capital structure (Debt to Equity ratio), liquidity (Current Ratio), total asset turnover (Total Asset Turnover), inventory turnover (inventory turnover), CSR disclosure (Corporate Social Responsibility Disclosure) and profitability (profitability) Return on Investment) has a significant effect on firm value (Price Earning Ratio).

3. Based on the results of the first partial test, the capital structure (Debt to Equity ratio) and liquidity (Current Ratio) has a negative and not significant effect on profitability (Return on Investment). Total asset turnover (Total Asset Turnover) and inventory turnover (Inventory Turnover) have a positive and significant effect on profitability (Return on Investment). In addition, CSR (Corporate Social Responsibility Disclosure) disclosure has a positive and not significant effect on profitability (Return on Investment).

4. Based on the results of the second partial test, the capital structure (Debt to Equity ratio), liquidity (Current Ratio) and profitability (Return on Investment) have a negative and significant effect on firm value (Price Earning Ratio). Variable total asset turnover has a positive and significant effect on firm value (Price Earning Ratio). In addition, inventory turnover has a negative and not significant effect on firm value (Price Earning Ratio).

5. Profitability (Return on Investment) can be an intervening variable between the total asset turnover variable and the inventory turnover variable.

5.2 Limitations

Limitations of this study are as follows:

1. The selection of research objects only uses plantation companies for the period 2012-2016
2. Profitability can only mediate the relationship between two independent variables.
3. To measure the value of the company only use a proxy Price Earning Ratio (PER).
5.3 Suggestions
Based on the conclusions and limitations, suggestions can be made namely:
1. The next researcher is advised to use the research object of other companies contained on the IDX so that it can provide better results on the problem under study
2. The next researcher is recommended to use other variables as intervening variables
3. The next researcher is recommended to use a broader company value proxy, Price to Book Value (PBV) and Tobin's Q.

References


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