The Effect of Total Asset Turnover, Debt to Equity Ratio, Net Profit Margin, and Firm Size on Profitability in Company of Consumer Goods Industry

Jesica Jania¹, Eso Hernawan²
¹²Universitas Buddhi Dharma
jesicajania3@gmail.com, eso.hernawan@ubd.ac.id

At this time the economic development in Indonesia is uncertain and greatly affects the business world. This has resulted in increased competition between companies. In conditions like this, the company must be able to survive and try as much as possible to develop its business. To accomplish this goal, financial performance must be evaluated using ratio analysis. The aim of this research is to find out the effect of TATO, DER, NPM, Firm Size on Profitability using quantitative type of research. Method for determining the sample is by taking objects according to certain criteria, namely the purposive sampling. This research uses Eviews 10 software for data processing with various kinds of data analysis tests. The results of this research indicate two independent variables do not have a partial effect on profitability, such as TATO and Firm Size. There are also two independent variables that have a partial effect on profitability, such as DER and NPM. Meanwhile, 67.5% of the independent variables TATO, DER, NPM and Firm Size have an influence simultaneously on profitability and the remaining 32.5% are variables not examined.

Keywords: Equity, Liabilities, Net Profit, Sales, Total Assets

Introduction

Currently the economic development in Indonesia is uncertain and greatly affects the business world. This has resulted in increased competition between companies. In conditions like this, the company must be able to survive and try as much as possible to develop its business. Companies that can survive in all conditions are strong and competitive companies, while companies that are not competitive will not survive and can go bankrupt.

The consumer goods industry sector is still the main choice for investors to invest. This is because the consumer goods industry sector will continue to grow and the products are common goods.

Due to hard competition in the business world, every company must improve its performance to fulfill its targets. The primary goal of a company is to make a profit. To accomplish this goal, financial performance must be evaluated using ratio analysis. Internal and external stakeholders apply ratio analysis to examine the company's health and performance.

Profitability is used in this research, which is a ratio used as a reference for measuring how much profit is made to find out whether the company is running its business efficiently or not. Profitability can be explained or interpreted as the company's ability to generate profits from its normal business activities (David & Aprilyanti, 2018). Profitability also describes the company's

¹Corresponden: Jesica Jania. Universitas Buddhi Dharma. Jl. Imam Bonjol no.41 Karawaci Ilir Tangerang 15115. jesicajania3@gmail.com
ability to obtain profits or profits for a period at a certain time (Susandy & Anggraeni, 2018). Profitability for the company is very important because with stable profitability the company can maintain its business. Therefore, the company is required to always maintain the stability of its profitability and improve its work efficiency so as to make investors interested in investing. The problems that can be identified based on the background are as follows:
1. Identify the factors that affect the company's profitability such as TATO, DER, NPM, and Firm Size.
2. Intense competition requires companies to be able to maximize the efficiency of the company's performance so the profits can be increased.
3. Companies are required to always maintain stable profitability so the investors can be interested in investing.
4. The company's profitability is measured by net income obtained from company activities with assets owned by the company.

Literature Review
Definition of Total Asset Turnover
TATO is used to measure how quickly the company's assets turn over to generate sales (Desi Tarida Simorangkir et al., 2015). From the results of TATO can be seen various things related to the company's activities to help the company's management in measuring company performance. TATO formula that can be used:

\[
\frac{\text{Sales}}{\text{Total Asset}}
\]

Definition of Debt to Equity Ratio
(Desi Tarida Simorangkir et al., 2015) DER is used to measure how much capital is used as collateral for debt. A large DER illustrates a poor capital structure because there is more debt than owned capital. DER formula that can be used:

\[
\frac{\text{Total Liability}}{\text{Total Equity}} \times 100
\]

Definition of Net Profit Margin
(Sutrisno, 2017) Profit margin is the percentage of the company's ability to create profit compared to sales that have been achieved. NPM can describe the efficiency of a company. The greater the value of NPM, it means the company is productive in maximizing its management efficiency. NPM formula that can be used:

\[
\frac{\text{Net Profit}}{\text{Sales}} \times 100
\]

Definition of Firm Size
(Widiastari & Yasa, 2018) Firm Size can be defined by a scale based on total assets, total sales, share value, and other factors. Firm size is better determined by total assets because it is more stable than sales which can fluctuate every year. Firm Size formula that can be used:

\[
\ln (\text{Total Asset})
\]
Definition of Return On Asset
(Desi Tarida Simorangkir et al., 2015) ROA measures a company's capacity to generate income from all its assets. Return on assets is a method to estimate how well a company's assets are managed to gain profit. ROA formula that can be used:

\[
\frac{\text{Net Profit}}{\text{Total Asset}} \times 100
\]

Financial Ratio Benchmark
According to (Kasmir, 2015) financial ratio benchmarks are as follows:

a. TATO has a benchmark of 2
b. DER has a benchmark of 90%
c. NPM has a benchmark of 20%
d. ROA has a benchmark of 30%

Firm Size Benchmark
According to (Hery, 2017) firm size benchmarks are as follows:

a. Small Company
   Net worth (excluding business premises) > 50,000,000 – 500,000,000 or sales > 300,000,000 – 2,500,000,000.

b. Medium Company
   Net worth (excluding business premises) > 500,000,000 – 10,000,000,000 or sales > 2,500,000,000 – 50,000,000,000.

c. Big Company
   Net worth (excluding business premises) > 10,000,000,000 or sales > 50,000,000

Figure 1. Framework

1. The effect of TATO on Profitability
   TATO is useful to measure how effectively a company can utilize its assets in generating sales. A high of TATO usually indicates that the company is managed with good management. A good asset turnover in a company can make sales increase.

2. The effect of DER on Profitability
   DER is useful to see the comparison between the amount of debt owned by the company and its own issued capital. The larger of DER will affect the company's profitability and can make the company's profits decrease because of the debt that need to be paid is getting bigger.

3. The effect of NPM on Profitability
   NPM shows the percentage of net income obtained from all sales in a company. NPM calculation can be done by dividing the company’s net income by total sales. The larger NPM
means that the company is productive in maximizing its management efficiency, conversely, the smaller NPM indicates that the company is still less productive in maximizing its management efficiency.

4. **The effect of Firm Size on Profitability**
   
   Firm Size describes the large or small scale of a company that can be determined from total assets or total sales. Firm size is better to be determined by total assets because it is more stable than sales, which can fluctuate every year.

5. **The effect of TATO, DER, NPM and Firm Size on Profitability**
   
   The greater the value of TATO, NPM, Firm Size indicates the positive effect it has on the profitability and indicates company’s management is in good condition with efficient in maximizing its performance so that the company’s profitability increases, while the greater the DER value indicates a negative effect on the company's profitability. This is because the company must pay off the company's increasing debt, resulting in the company's profitability decreasing.

**Hypothesis Formulation**


**Methods**

The type of this research is quantitative research conducted by collecting data obtained from financial statements of the company that is the object of research. In connection with the problem and the aims of this research to determine the effect of TATO, DER, NPM, and Firm Size on Profitability.

**Population and Sample**

According to (Unaradjan, 2019) population is an object or subject that occurs in a certain area and meets certain criteria related to the research problem. This research took a population of 54 company of consumer goods industry listed on IDX.

Sample is part of the population that has certain characteristics or conditions must be researched (Unaradjan, 2019). Researcher took samples using a purposive sampling method, the sample was selected using criteria. The following criteria are used to determine the requirement:

1. Company of consumer goods industry listed on IDX 2016-2020
2. Company of consumer goods industry that have published complete financial reports for 2016-2020.

   Sample obtained based on purposive sampling method resulted 6 company of consumer goods industry and obtained 30 data based on sample.

<table>
<thead>
<tr>
<th>No</th>
<th>Code</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CEKA</td>
<td>“Wilmar Cahaya Indonesia Tbk”</td>
</tr>
<tr>
<td>2</td>
<td>DLTA</td>
<td>“Delta Djakarta Tbk”</td>
</tr>
<tr>
<td>3</td>
<td>ICBP</td>
<td>“Indofood CBP Sukses Makmur Tbk”</td>
</tr>
<tr>
<td>4</td>
<td>MLBI</td>
<td>“Multi Bintang Indonesia Tbk”</td>
</tr>
<tr>
<td>5</td>
<td>HMSP</td>
<td>“H.M. Sampoerna Tbk”</td>
</tr>
<tr>
<td>6</td>
<td>UNVR</td>
<td>“Unilever Indonesia Tbk”</td>
</tr>
</tbody>
</table>
Data collection technique

Documentation technique is the method used by author for data collection by taking data and studying various kinds of useful documents from various sources such as financial reports from the IDX website "www.idx.co.id", articles, scientific journals, and books to support this research. The technique is:

1. Data from the financial statements of consumer goods industry that have been downloaded through the IDX website will be analyzed.
2. The data is processed using the EViews 10 application which is a computer program for problem solving.

Data analysis technique

1. Descriptive Statistics Analysis

Descriptive statistics is data processing that uses tables, diagrams, and graphs to describe the object during research using sample or population data. In (Sugiyono, 2018) descriptive statistics are used to examine data by reporting facts obtained without the purpose of making conclusions or generalizations.

2. Classical Assumption Test

1. Normality Test

The normality test is used to evaluate and quantify whether the data collected have a normal distribution, and whether the data obtained come from a normally distributed population (Gunawan, 2020). If the significance is more than 5%, the data is normally distributed.

2. Multicollinearity test

(Gunawan, 2020) A regression model test known as multicollinearity test is used to see if there is a correlation between variables or not. If the VIF does not exceed 10 it means the data does not have multicollinearity.

3. Autocorrelation test

(Singgih Santoso, 2019) The autocorrelation test is used to see if there is a correlation between the confounding error in t period and the error in the previous period of the regression model in a linear regression model. If Durbin Warson is between -2 and +2 means there is no autocorrelation.

4. Heteroscedasticity Test

(Rochmat Aldy Purnomo, 2017) The residual variance from the regression model that is not the same in all observations is known as the heteroscedasticity test. There is no heteroscedasticity if the probability is more than 0.05.

3. Multiple Regression Analysis

Data processing using Eviews 10. (Sugiyono, 2018) Multiple linear regression test is done to determine how the dependent variable's up and down condition changes when two or more dependent variables as predictor factors rise in value.

The research model:

\[ Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon \]

\[
\begin{align*}
Y & = \text{ROA} \\
X_1 & = \text{TATO} \\
X_2 & = \text{DER} \\
X_3 & = \text{NPM} \\
X_4 & = \text{Firm Size} \\
\varepsilon & = \text{error}
\end{align*}
\]
4. Hypothesis test
   1. t test
      The t test is used to examine the influence of X1, X2, X3, and X4 on Y via a comparison between t-count and t-table. If the significant level is less than 0.05, the independent variable has a significant effect partially on the dependent variable, the hypothesis will be accepted.
   2. F test
      The F test is used to examine how X1, X2, X3, and X4 influence Y simultaneously. If the significant level value is less than 0.05 so the independent variables simultaneously have a significant effect on the dependent variable, the hypothesis will be accepted.

3. Coefficient of Determination
   (Ghozali, 2016) The coefficient of determination examines how much influence the independent variable has on the dependent variable. R² value is between zero and one. The low R² value shows that the X1, X2, X3, X4 variable can explain all of the information required to make predictions on the Y variable.

Results
   The author examined the variables obtained from financial statement data on IDX website by conducting specific calculations.
   1. Total Asset Turnover
      TATO describe a company in the process of managing its assets, which are used to handle the company's economic activities. The higher of turnover rate, the company is more efficient in handling its management. Here are the results of the TATO calculation:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CEKA</td>
<td>2.89</td>
<td>3.06</td>
<td>3.10</td>
<td>2.24</td>
<td>2.32</td>
</tr>
<tr>
<td>2</td>
<td>DLTA</td>
<td>0.65</td>
<td>0.58</td>
<td>0.59</td>
<td>0.58</td>
<td>0.45</td>
</tr>
<tr>
<td>3</td>
<td>ICBP</td>
<td>1.19</td>
<td>1.13</td>
<td>1.12</td>
<td>1.09</td>
<td>0.45</td>
</tr>
<tr>
<td>4</td>
<td>MLBI</td>
<td>1.43</td>
<td>1.35</td>
<td>1.26</td>
<td>1.28</td>
<td>0.68</td>
</tr>
<tr>
<td>5</td>
<td>HMSP</td>
<td>2.25</td>
<td>0.29</td>
<td>2.29</td>
<td>2.08</td>
<td>1.86</td>
</tr>
<tr>
<td>6</td>
<td>UNVR</td>
<td>2.39</td>
<td>2.18</td>
<td>2.06</td>
<td>2.08</td>
<td>2.09</td>
</tr>
</tbody>
</table>

Source: Excel

2. Debt to Equity Ratio
   DER is used as a benchmark in comparing the amount of debt and equity owned by the company. Here are the results of the DER calculation:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CEKA</td>
<td>60.60</td>
<td>54.22</td>
<td>19.69</td>
<td>23.14</td>
<td>24.27</td>
</tr>
<tr>
<td>2</td>
<td>DLTA</td>
<td>18.32</td>
<td>17.14</td>
<td>15.71</td>
<td>17.50</td>
<td>20.17</td>
</tr>
<tr>
<td>3</td>
<td>ICBP</td>
<td>56.22</td>
<td>55.57</td>
<td>51.35</td>
<td>45.14</td>
<td>105.87</td>
</tr>
<tr>
<td>4</td>
<td>MLBI</td>
<td>177.23</td>
<td>135.71</td>
<td>147.49</td>
<td>152.79</td>
<td>102.83</td>
</tr>
<tr>
<td>5</td>
<td>HMSP</td>
<td>24.38</td>
<td>26.47</td>
<td>31.80</td>
<td>42.67</td>
<td>64.26</td>
</tr>
<tr>
<td>6</td>
<td>UNVR</td>
<td>255.97</td>
<td>265.46</td>
<td>175.30</td>
<td>290.95</td>
<td>315.90</td>
</tr>
</tbody>
</table>

Source: Excel
3. Net Profit Margin
The NPM is used to evaluate the company's profits. The high NPM value indicates that the company's efficiency is growing. Here are the results of the NPM calculation:

<table>
<thead>
<tr>
<th>No</th>
<th>Code</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2016</td>
</tr>
<tr>
<td>1</td>
<td>CEKA</td>
<td>6.07</td>
</tr>
<tr>
<td>2</td>
<td>DLTA</td>
<td>32.84</td>
</tr>
<tr>
<td>3</td>
<td>ICBP</td>
<td>10.56</td>
</tr>
<tr>
<td>4</td>
<td>MLBI</td>
<td>30.10</td>
</tr>
<tr>
<td>5</td>
<td>HMSP</td>
<td>13.37</td>
</tr>
<tr>
<td>6</td>
<td>UNVR</td>
<td>15.96</td>
</tr>
</tbody>
</table>

Source: Excel

4. Firm Size
Firm Size describe how big or small the company. A high value of total asset indicates the company size is big. Here are the results of the Firm Size calculation:

<table>
<thead>
<tr>
<th>No</th>
<th>Kode</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2016</td>
</tr>
<tr>
<td>1</td>
<td>CEKA</td>
<td>27.99</td>
</tr>
<tr>
<td>2</td>
<td>DLTA</td>
<td>27.81</td>
</tr>
<tr>
<td>3</td>
<td>ICBP</td>
<td>30.99</td>
</tr>
<tr>
<td>4</td>
<td>MLBI</td>
<td>28.45</td>
</tr>
<tr>
<td>5</td>
<td>HMSP</td>
<td>31.38</td>
</tr>
<tr>
<td>6</td>
<td>UNVR</td>
<td>30.45</td>
</tr>
</tbody>
</table>

Source: Excel

5. Return On Asset
ROA is used to measure the effectiveness of asset management in obtaining a company's net income. Here are the results of the ROA calculation:

<table>
<thead>
<tr>
<th>No</th>
<th>Code</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2016</td>
</tr>
<tr>
<td>1</td>
<td>CEKA</td>
<td>17.51</td>
</tr>
<tr>
<td>2</td>
<td>DLTA</td>
<td>21.25</td>
</tr>
<tr>
<td>3</td>
<td>ICBP</td>
<td>12.56</td>
</tr>
<tr>
<td>4</td>
<td>MLBI</td>
<td>43.17</td>
</tr>
<tr>
<td>5</td>
<td>HMSP</td>
<td>30.02</td>
</tr>
<tr>
<td>6</td>
<td>UNVR</td>
<td>38.16</td>
</tr>
</tbody>
</table>

Source: Excel

Descriptive Statistics Analysis
Descriptive statistics is the processing of data in the form of tables, graphs, or diagrams that provide a description of the attributes, such as the minimum value, maximum value and mean. In this research, descriptive statistics are used to describe information about the variables.
Table 7. Descriptive Statistics Analysis Results

<table>
<thead>
<tr>
<th></th>
<th>ROA</th>
<th>TATO</th>
<th>DER</th>
<th>NPM</th>
<th>FIRM_SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>24.94467</td>
<td>1.567000</td>
<td>93.13733</td>
<td>18.37167</td>
<td>29.65267</td>
</tr>
<tr>
<td>Median</td>
<td>22.24000</td>
<td>1.390000</td>
<td>54.89500</td>
<td>15.15000</td>
<td>29.57500</td>
</tr>
<tr>
<td>Maximum</td>
<td>52.67000</td>
<td>3.100000</td>
<td>315.9000</td>
<td>39.00000</td>
<td>32.27000</td>
</tr>
<tr>
<td>Minimum</td>
<td>7.160000</td>
<td>0.290000</td>
<td>15.71000</td>
<td>2.520000</td>
<td>27.79000</td>
</tr>
</tbody>
</table>

Source: Analysis using Eviews 10

Based on the data above, it can be described as follows:

1. Profitability (ROA) as Y has a mean value 24.94467. The maximum value of Profitability (Y) is 52.67000, and the minimum value is 7.160000.
2. The mean value of TATO as X1 is 1.567000. The maximum value of TATO is 3.100000, and the minimum value of TATO is 0.290000.
3. The mean value of DER as X2 is 93.13733. The maximum value of DER is 315.9000, and the minimum value of DER is 15.71000.
4. The mean value of NPM as X3 is 18.37167. The maximum value of NPM is 39.0000, and the minimum value of NPM is 2.520000.
5. The mean value of Firm Size as X4 is 29.65267. The maximum value of Firm Size is 32.27000, and the minimum value of Firm Size is 27.79000.

Classical Assumption Test

Normality Test

The goal of this test is to determine each variable in the regression model is normally distributed or not.

Based on the diagram image, it is possible to conclude the data is normally distributed because the results are 0.713532 it means probability value is more than 5% or 0.05 which is the normal standard of statistic test.
Multicollinearity Test

This test is used to determine if there is a high or perfect correlation between independent variables in the model or not.

Table 8. Results of Multicollinearity Test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Variance</th>
<th>VIF Uncentered</th>
<th>VIF Centered</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>1273.680</td>
<td>696.0721</td>
<td>NA</td>
</tr>
<tr>
<td>TATO</td>
<td>6.037064</td>
<td>10.32069</td>
<td>2.219662</td>
</tr>
<tr>
<td>DER</td>
<td>0.000343</td>
<td>3.105816</td>
<td>1.478812</td>
</tr>
<tr>
<td>NPM</td>
<td>0.036662</td>
<td>9.250811</td>
<td>2.487931</td>
</tr>
<tr>
<td>FIRM_SIZE</td>
<td>1.189782</td>
<td>573.3013</td>
<td>1.550540</td>
</tr>
</tbody>
</table>

Source: Processed using Eviews 10

From the results above, the VIF value of TATO is 2.219662, VIF value of DER is 1.478812, VIF value of NPM is 2.487931, VIF value of Firm Size is 1.55.0540. Each variable has a VIF > 10 which means that there is no multicollinearity.

Autocorrelation Test

This test is used to determine whether a confounding variable in a period is correlated with other confounding variables.

Table 9. Results of Multicollinearity Test

```
| “D-W stat” | 1.636085 |
```

Source: Processed using Eviews 10

The result of "Durbin Watson" is 1.636085 which means it is detected that there is no autocorrelation in this test because the value is between -2 < and < 2. Then the data can be used for further analysis.

Heteroscedasticity Test

The heteroscedasticity test is used to determine whether there is a difference in variance between observation periods.

Table 10. Results of Heteroscedasticity Test

<table>
<thead>
<tr>
<th>F-statistic</th>
<th>3.391042</th>
<th>Prob. F (14,15)</th>
<th>0.0125</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obs*R-squared</td>
<td>22.79707</td>
<td>Prob. Chi-Square (14)</td>
<td>0.0637</td>
</tr>
<tr>
<td>Scaled explained SS</td>
<td>22.68099</td>
<td>Prob. Chi-Square (14)</td>
<td>0.0657</td>
</tr>
</tbody>
</table>

Source: Processed using Eviews 10

Based on the results above there is no heteroscedasticity in this current test because Chi-square probability value is 0.0637, which indicates that the probability is above 5% which is the normal standard of statistic test.
Multiple Regression Analysis

Table 11. Results of Multiple Regression Analysis

<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>C</td>
<td>-105.8003</td>
<td>35.68865</td>
<td>-2.964536</td>
<td>0.0066</td>
</tr>
<tr>
<td>TATO</td>
<td>8.219957</td>
<td>2.457044</td>
<td>3.345466</td>
<td>0.0026</td>
</tr>
<tr>
<td>DER</td>
<td>0.042028</td>
<td>0.018526</td>
<td>2.268631</td>
<td>0.0322</td>
</tr>
<tr>
<td>NPM</td>
<td>1.052952</td>
<td>0.191474</td>
<td>5.499199</td>
<td>0.0000</td>
</tr>
<tr>
<td>FIRM_SIZE</td>
<td>3.190366</td>
<td>1.090771</td>
<td>2.924871</td>
<td>0.0072</td>
</tr>
</tbody>
</table>

Here are the equation coefficients that can be explained based on the regression model above:

1. Profitability constant value is -105.8003 concluded if the value of TATO(X1), DER(X2), NPM(X3) and Firm Size(X4) is 0 then the value of profitability(Y) is -105.8003.
2. TATO regression coefficient is 8.219957. This means if TATO increase by one unit, it will increase profitability value by 8.219957 unit.
3. DER regression coefficient is 0.042028. This means if DER increase by one unit, it will increase profitability value by 0.042028 unit.
4. NPM regression coefficient is 1.052952. This means if NPM increase by one unit, it will increase profitability value by 1.052952 unit.
5. Firm Size regression coefficient is 3.190366. This means if Firm Size increase by one unit, it will increase profitability value by 3.190366 unit.

Hypothesis Test

Table 12. t Test Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-2.964536</td>
<td>0.0066</td>
</tr>
<tr>
<td>TATO</td>
<td>0.280751</td>
<td>0.7810</td>
</tr>
<tr>
<td>DER</td>
<td>4.076158</td>
<td>0.0003</td>
</tr>
<tr>
<td>NPM</td>
<td>3.111414</td>
<td>0.0043</td>
</tr>
<tr>
<td>FIRM_SIZE</td>
<td>0.677581</td>
<td>0.5036</td>
</tr>
</tbody>
</table>

Based on the data above, the t-test can be interpreted as follows:

1. Variable X1 (Total Asset Turnover)
   a. Hypothesis Formulation
      H0: TATO has no significant impact on profitability.
      H1: TATO has a significant impact on profitability.
   b. Conclusion
      TATO resulting a significant value is 0.7810 more than 0.05. It is concluded that TATO partially has no significant impact on profitability. This is supported by the t-count value which obtained a value of 0.280751 less than t-table value 2.060. H0 is accepted.

2. Variable X2 (Debt to Equity Ratio)
   a. Hypothesis Formulation
      H0: DER has no significant impact on profitability.
      H2: DER has a significant impact on profitability
b. Conclusion
DER resulting a significant value is 0.0003 less than 0.05. It is concluded that DER partially has a significant impact on profitability. This is supported by the t-count value which obtained a value of 4.076158 more than t-table value 2.060. H2 is accepted.

3. Variable X3 (Net Profit Margin)
a. Hypothesis Formulation
H0: NPM has no significant impact on profitability.
H3: NPM has a significant impact on profitability
b. Conclusion
NPM resulting a significant value is 0.0043 less than 0.05. It is concluded that NPM partially has a significant impact on profitability. This is supported by the t-count value which obtained a value of 3.111414 more than t-table value 2.060. H3 is accepted.

4. Variable X4 (Firm Size)
a. Hypothesis Formulation
H0: Firm Size has no significant impact on profitability.
H4: Firm Size has a significant impact on profitability
b. Conclusion
Firm Size resulting a significant value of 0.5036 more than 0.05. It is concluded that Firm Size partially has no significant impact on profitability. This is supported by the t-count value which obtained a value of 0.677581 less than t-table value 2.060. H0 is accepted.

F Test

<table>
<thead>
<tr>
<th>“F-statistic”</th>
<th>16.08422</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prob (F-statistic)</td>
<td>0.000000</td>
</tr>
</tbody>
</table>

Source: Processed using Eviews 10

Based on the data above, the F-test can be interpreted as follows:
a. Hypothesis Formulation
H0: TATO, DER, NPM and Firm Size simultaneously have no significant impact on profitability.
H5: TATO, DER, NPM and Firm Size simultaneously have a significant impact on profitability.
b. Conclusion
The F-count value obtained is 16.08422 and the probability obtained is 0.000000 < 0.05. It is concluded that the TATO, DER, NPM and Firm Size together have an impact on Profitability. H5 is accepted.

Coefficient of Determination

<table>
<thead>
<tr>
<th>“R-squared”</th>
<th>0.720160</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted R-squared</td>
<td>0.675386</td>
</tr>
</tbody>
</table>

Source: Processed using Eviews 10

The results above show the adjusted R-squared value is 0.675386 which means TATO, DER, NPM and Firm Size can explain 67.5% of the Profitability. While 32.5% is a variable that is not examined.
Conclusion

According to the results of research that has been done, TATO and Firm size partially do not have a significant effect on profitability because the significant value is more than 0.05 while DER and NPM partially have a positive and significant effect on profitability because the significant value is less than 0.05. Simultaneously TATO, DER, NPM, and Firm Size have an influence on profitability with an adjusted R-squared value is 0.675386, which mean X1, X2, X3, X4 variable in this research able to explain 67.5% of Y variable. While the remaining 32.5% are not examined.

References


