THE IMPACT OF ASSET MANAGEMENT, CAPITAL STRUCTURE, AND FIRM SIZE TOWARD PROFITABILITY

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Submitted: 20-03-2023, Revised: 27-04-2023, Accepted: 26-05-2023

ABSTRACT

The aim of this study is to determine the influence of asset management, capital structure, and company size on the profitability of non-cyclical sector manufacturing companies listed on the Indonesia Stock Exchange in the 2018-2020 period. The data population in this study amounted to 111 non-cyclical sector manufacturing companies, a non-probability sampling technique (purposive sampling) by applying several criteria in this study. The data sample used is 75 data with 25 companies in the 2018-2022 period, where later the data will be processed using E-views ver.12 software. In this study, a classical assumption test was carried out using the multiple linear regression method and the suitable result for this study was the Random Effect Model (REM). This research shows that asset management has a positive effect on profitability, capital structure negatively affects profitability, and the size of the company has no impact on profitability with negative direction.

Keywords: asset management, capital structure, corporate size, profitability

1. INTRODUCTION

The establishment of a company must be able to have clear goals, including short-term and long-term goals. The main objective of a company is to seek profit is to increase the company value so that it can provide prosperity for its owners or shareholders. Therefore, to achieve these goals, companies must maximize their strengths to generate profits. The current obstacle for companies in achieving this is the COVID-19 pandemic, which is not only detrimental to the company but also to investors who rely heavily on company performance. Business competition for business people is also increasingly competitive so that many companies strengthen their company's performance in order to maintain the company's survival in this difficult time. Therefore, the company must utilize existing resources so that later it will produce outputs that can support the company's main goal of making a profit. One of them is a manufacturing company, which is an entity that produces or processes raw goods into finished or semi-finished goods, which will later be sold for profit. For manufacturing companies in the non-cyclical sector, every process carried out requires very precise and efficient calculations so that the goods produced can not only be sold but can generate maximum profit. To measure whether the company's performance has been maximized or not is by measuring the company's profitability level with existing financial ratios.

The profitability of a company can be influenced by many things, including asset management, capital structure, and company size. Good asset management is when the company knows how to use its assets maximally to get maximum profit. This is because the assets owned by the company are used to support the achievement of profits, especially in its operational activities. A high capital structure indicates that the company prefers to take funding from third parties or in the form of debt. This will reduce the level of profitability due to the emergence of costs such as interest expense and others. The size of company can
be seen from the number of assets owned. The larger the size of the company will reduce the level of profitability due to the costs incurred to maintain these assets.

This research replicates the study of Purba and Bimantara [1] which examines the impact of asset management toward profitability. This research has several differences with previous research. First, this research used non-cyclical sector manufacturing companies listed on the Indonesia Stock Exchange, while the companies used in Purba and Bimantara [1] is transportation companies listed on the Indonesia Stock Exchange. Second, this research uses a period of 2018-2020, while the research period of Purba and Bimantara [1] from 2013-2017. Third, there are two additional variables, which are capital structure and firm size from Kartikasari and Merianti [2]. Based on the outline above, it is necessary to analyze again the impact of asset management, capital structure, and firm size toward profitability. The aim of this research was to obtain empirical evidence regarding (1) the impact of asset management toward profitability, (2) the impact of capital structure toward profitability, and (3) the impact of firm size toward profitability.

2. LITERATURE REVIEW

Signaling Theory

Signaling theory is a theory in which there are information providers and recipients of information, where the giver will signal information related to the company that is beneficial to the recipient. According to Farida et al. [3], the form of information conveyed from the company to the recipients of information, namely parties outside the company in the form of investment decisions. This theory also explains the actions taken by the company to signal useful information about the company to investors with the aim of future business prospects. As is known, of course those who have more information related to the company are the internal parties of the company itself, therefore to avoid information asymmetry between the two parties, the company will have an urge to provide information related to company performance. The submission of this information is carried out through financial reports in which there is various information that has been confirmed by the company. The company of course wants to show good company performance, where one of the supporting factors is the profitability of the company itself. How can a company improve its performance and generate high profits so that external parties can be interested in collaborating for future business prospects. It is hoped that investors and other external parties can make the best use of it for the prospects of future business activities.

Profitability

According to Tanapuan et al. [4] profitability ratio is the percentage used by the company to measure the extent of the company's ability to generate profits in a predetermined period. Profitability is a ratio to measure the company's ability to make a profit where this will be indicated by the amount of profit that the company can get from sales and company investment income according to Novika and Siswanti [5]. This can also be used as one of the decision makers for the company because profitability outlines the company's performance. This ratio is used to see the ability of a company's performance in achieving the company's own profit level. Profitability in this research is proxied by the return on assets ratio (ROA), which is calculated by dividing net income with total assets owned by the company.
Asset Management

According to Kusmiati [6] in asset management that the company's assets are actually a form of investment, where of course the company expects a return on the investment in the form of profit for the company. The better the management of the company's assets, the higher the level of profitability of a company. Asset management in this study is proxied by the fixed assets turnover ratio (FATO). This ratio is calculated by comparing the net sales with total fixed assets owned by the company.

Capital Structure

According to Larianti and Purbawangsa [7] capital structure is calculated by dividing the amount of long-term debt with own capital. The higher the capital structure of a company, this will indicate that the company prefers to do funding from third parties in the form of debt, so the company's profitability will decrease. The capital structure in this study is proxied by debt to equity ratio (DER) which is calculated by comparing total liabilities with total equity owned by the company.

Firm Size

According to Balqis and Safri [8] firm size is a comparison of the size or size of a company where this is expressed through total assets, when the company has a large amount of assets. The size of the company is one of the variables that can determine the value of the company where the size of the company can explain the total number of assets owned by the company according to Rejeki and Haryono [9]. According to Prastuti and Sudiartha [10], large or small, the total amount of assets and capital used by a company is a reflection of the size of the company itself. The larger the size of a company, the greater the assets owned by the company, so that the company's profitability will decrease due to the costs of adding these assets. Firm size in this research is proxied by size ratio (SIZE), which is calculated by natural logarithm of total assets owned by the company.

Prior Research

Research by Susetyo [11], Kusmiati [6], Chandra et al. [12], Purba and Dimantara [1], Puspita et al. [13], and Sitorus et al. [14] stated that asset management does have a positive impact toward profitability. However, the results of research conducted by Firmansyah and Syarifudin [15] states that asset management has no effect on profitability with positive direction. Research by Haryanto [16], and Kartikasari and Merianti [2] concludes that capital structure impact positively toward profitability. Research conducted by Nasimi [17], Mahardhika and Marbun [18], Solihin [19], Chandra et al. [12], and Lorenza et al. [20] concludes that capital structure has negative impact toward profitability and research conducted by Sukasa et al. [21], Azzahra and Nasib [22], and Sitorus et al. [14] concludes that capital structure has no effect and negative toward profitability. In addition, the results of study conducted by Susetyo [11] which state that capital structure has no effect and positive on profitability.

Research conducted by Miswanto et al. [23], Azzahra dan Nasib [22], and Chandra et al. [12] states that firm size has positive effect on profitability. Research conducted by Kartikasari and Merianti [2] concludes different results stating that firm size has a negative impact toward profitability, other research conducted by Lorenza et al. [20] stated that profitability
has no impact and negative toward profitability. In addition, the results of research conducted by Santini and Baskara [24] which state that firm size has no impact and positive on profitability.

Hypothesis Development

The Impact of Asset Management on Profitability

Asset management is an ability for companies to manage their assets. The main purpose of asset management is so that the company can manage the assets that it already has so that they can be utilized as much as possible to achieve the initial goal of purchasing company assets, namely getting profit from these assets. Costs will of course arise when purchasing assets so of course the company will expect the maximum amount of return as well. For companies, good asset management can be interpreted as the company's ability to utilize its assets maximally, effectively, and efficiently. If asset management in the company is correct and appropriate, this will positively affect profitability through sales which are also maximally supported. The hypothesis proposed to determine the relationship between asset management and profitability is:

H1: Asset management has a positive effect on profitability.

The Impact of Capital Structure on Profitability

Capital structure is a composition of company funding that can come from external parties and internal parties. The external party in question is a third party from the company where funding is usually in the form of short and long-term debt, while the company's internal funding usually comes from retained earnings. The higher the value of the capital structure indicates that the company will prefer to do funding through external parties or third parties from the company. Funding in the company aims to support the company's business activities, so it is hoped that if there is funding from external parties and internal companies, the company will feel helped from the capital side itself. Increased business activities will have a positive or unidirectional effect on company revenue or profit income levels so that it is hoped that this capital can assist the company in achieving these goals. The existence of additional costs such as interest expense, of course, will affect the level of profitability of the company because the profit earned will be used to cover the costs arising from the issuance of debt for the company.

The hypothesis proposed to determine the relationship between capital structure and profitability is:

H2: Capital structure negatively affects profitability.

The Impact of Firm Size on Profitability

Company size shows how big a company is when viewed in terms of its asset ownership. This can be interpreted as the larger the size of a company, then the number of assets owned by the company to support its business activities is greater. The number of assets owned will of course lead to an increase in the costs of these assets. The costs in question are such as purchasing assets or maintaining these assets where this will interfere with the level of profitability of the company. The more assets the company has, the greater the maintenance costs for the company's assets. The profit earned by the company not only adds to the company's wealth but will be used to cover the costs that will arise along with the increase in
assets in the company. So, it can be concluded that the size of a company will have a negative influence on the level of profitability of a company.

The hypothesis proposed to determine the relationship between company size and profitability is:

**H3: Company size has a negative effect on profitability.**

The model in this study based on the explanation above is:

![Research Model Diagram]

**Figure 1. Research Model**

## 3. RESEARCH METHOD

### Population and Sample

This study uses a population of non-cyclical sector manufacturing companies listed in the 2018-2020 on the Indonesia Stock Exchange. In this research, the technique that used for selecting the sample is purposive sampling. The criteria for selecting the sample used are: (a) Non-cyclical sector manufacturing companies listed in the Indonesia Stock Exchange from 2018-202, (b) Companies that conduct IPO after December 2017, (c) The company earned profits consecutively during the 2018-2020 period, (d) The company prepares financial statements in Rupiah currency. Based on those criteria, a sample of 25 companies was obtained with 12 companies outlier. Total of sample in this research are 25 companies with a research period from 2018 to 2020, 75 data were obtained.

### Data Collection Technique

The data is collected from the financial statements of non-cyclical sector manufacturing companies listed in the Indonesia Stock Exchange from 2018-2020. The collected data in this research processed using EViews 12 version software.

### Variable Operations

The dependent variable in this study is profitability, and the independent variables are asset management, capital structure, and firm size. According to Cahyani and Indah [25] research, profitability proxied by return on assets ratio (ROA) is measured using the formula:

\[
ROA = \frac{\text{Net Income}}{\text{Total assets}}
\]
According to Kusmiati [6] research, asset management symbolized by FATO is measured using the formula:

\[
FATO = \frac{\text{Net Sales}}{\text{Total Fixed Assets}}
\]

According to Haryanto [16] research, capital structure proxied by debt to equity ratio (DER) is measured using the formula:

\[
\text{DER} = \frac{\text{Total Liabilities}}{\text{Total Equity}}
\]

According to Agape and Triyonowati [26] research, firm size proxied by SIZE which is measured using the formula:

\[
\text{SIZE} = \ln(\text{Total Assets})
\]

4. RESULTS AND DISCUSSION

Descriptive Statistics

Based on the criteria explained previously, a sample of 25 companies was obtained with 12 companies outlier. Total of sample in this research are 25 companies with a research period from 2018 to 2020, 75 data were obtained. The results of the statistic descriptive test for each variable are shown in the following table (Table 1):

<table>
<thead>
<tr>
<th>Variable</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>0.000526</td>
<td>0.167475</td>
<td>0.068196</td>
<td>0.044964</td>
</tr>
<tr>
<td>FATO</td>
<td>0.560202</td>
<td>7.182171</td>
<td>2.972217</td>
<td>1.499121</td>
</tr>
<tr>
<td>DER</td>
<td>0.083856</td>
<td>2.208257</td>
<td>0.750169</td>
<td>0.535453</td>
</tr>
<tr>
<td>SIZE</td>
<td>6.912016</td>
<td>28.23007</td>
<td>16.89820</td>
<td>6.528029</td>
</tr>
</tbody>
</table>

Return on assets (ROA) has a minimum value of 0.000526 and a maximum value of 0.167475. The mean value and standard deviation of ROA respectively is 0.068196 and 0.044964. The standard deviation value of profitability is smaller than the mean value. it concludes that the distribution of profitability data is small. Asset Management (FATO) has a minimum value of 0.560202 and a maximum value of 7.182171. The mean value and standard deviation of FATO respectively is 2.972217 and 1.499121. The standard deviation value of asset management is smaller than the mean value. it concludes that the distribution of asset management data is small. Capital structure (DER) has a minimum value of 0.083856 and a maximum value of 2.208257. The mean value and standard deviation of DER respectively is 0.750169 and 0.535453. The standard deviation value of capital structure is smaller than the mean value, it concludes that the distribution of capital structure data is...
small. Firm Size (SIZE) has a minimum value of 6.912016 and a maximum value of 6.912016. The mean value and standard deviation of SIZE respectively is 16.89820 and 6.528029. The standard deviation value of firm size is smaller than the mean value, it concludes that the distribution of firm size data is small.

**Chow Test**

The Chow test result is shown in the following table (Table 2):

<table>
<thead>
<tr>
<th>Effect Test</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-Section F</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

The probability of cross-section F from the results of the Chow test is 0.0000. This value is smaller than 0.05 so it can be concluded that the model chosen is the fixed effect model.

**Hausman Test**

The Hausman test result are shown in the following table (Table 3):

<table>
<thead>
<tr>
<th>Test Summary</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-Section Random</td>
<td>0.7131</td>
</tr>
</tbody>
</table>

The probability of cross-section random from the results of the Hausman test is 0.7131. This value is greater than 0.05 so it can be concluded that the model chosen is random effect model.

**Lagrange Multiplier Test**

The Lagrange Multiplier test result is shown in the following table (Table 4):

<table>
<thead>
<tr>
<th>Cross-Section</th>
<th>Test Hypothesis Time</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breusch-Pagan</td>
<td>24.77289 (0.0000)</td>
<td>25.66732</td>
</tr>
<tr>
<td></td>
<td>0.894431 (0.3443)</td>
<td></td>
</tr>
</tbody>
</table>

The probability value (Prob.) of Breusch-Pagan from the results of the Lagrange Multiplier test is 0.0000. This value is smaller than 0.05 so it can be concluded that the model chosen is the random effect model.
Random Effect Model

The random effect model test result is shown in the following table (Table 5):

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistics</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.075559</td>
<td>0.022965</td>
<td>3.290145</td>
<td>0.0016</td>
</tr>
<tr>
<td>FATO</td>
<td>0.011446</td>
<td>0.003531</td>
<td>3.241683</td>
<td>0.0018</td>
</tr>
<tr>
<td>DER</td>
<td>-0.027086</td>
<td>0.010945</td>
<td>-2.474778</td>
<td>0.0157</td>
</tr>
<tr>
<td>SIZE</td>
<td>-0.001246</td>
<td>0.001084</td>
<td>-1.149797</td>
<td>0.2541</td>
</tr>
</tbody>
</table>

Adjusted R squared

The Adjusted R-squared test result is shown in the following table (Table 6):

<table>
<thead>
<tr>
<th>Equation</th>
<th>Adjusted R-squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.199344</td>
</tr>
</tbody>
</table>

The value from the results of the Adjusted R-squared test is 0.199344, it means that asset management, capital structure, and firm size are only able to explain the variation of profitability of 19.9344%. The remaining 80.0656% is influenced by other variable not included in this research.

Hypothesis Test Result

The hypothesis testing result are shown in the following table (Table 7):

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>Prob.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FATO ➔ ROA</td>
<td>0.011446</td>
<td>0.0018</td>
</tr>
<tr>
<td>DER ➔ ROA</td>
<td>-0.027086</td>
<td>0.0157</td>
</tr>
<tr>
<td>SIZE ➔ ROA</td>
<td>-0.001246</td>
<td>0.2541</td>
</tr>
</tbody>
</table>

The regression coefficient of asset management (FATO) on profitability (ROA) is positive at 0.0018. The probability of p-value is 0.0018 smaller than 0.05. This result concludes that asset management has a positive impact toward profitability, that means Ha1 is accepted.

The regression coefficient of capital structure (DER) on profitability (ROA) is negative at 0.0157. The probability of p-value is 0.0157 smaller than 0.05. This result concludes that capital structure has a negative impact toward profitability, that means Ha2 is accepted.
The regression coefficient of firm size (SIZE) on profitability (ROA) is negative at 0.2541. The probability of p-value is 0.2541 greater than 0.05. This result concludes that firm size has a negative impact toward profitability, that means Ha3 is accepted.

Discussion

The Impact of Asset Management on Profitability

Asset Management has positive effect on profitability. These results are consistent with research by Susetyo [11], Kusmiati [6], Chandra et al. [12], Purba and Dimantara [1], Puspita et al. [13], and Sitorus et al. [14] states that asset management has positive impact toward profitability. Research is not aligned with research by Firmansyah and Syarifudin [15] has inconsistent research results, namely asset management has no positive effect on profitability. Given that the sample used is a manufacturing company in the non-cyclical sector, which is a company that produces raw goods into finished goods, the company's fixed assets such as machinery are one of the important pillars in the activity of producing these goods. The quality and quantity of finished goods become one of the benchmarks of sales success of a manufacturing company in the non-cyclical sector. Assets owned by manufacturing companies in the non-cyclical sector tend to be fixed because asset turnover in manufacturing activities is quite low compared to other types of companies.

In addition, the existence of asset management is not just recording the number of fixed assets owned by the company during a certain period, but is how the company maximizes a group of fixed assets to be able to generate profits and reduce expenses. Every year or during a specified period, the company must review the assets owned whether it is still feasible or still able to produce output according to company standards. With the addition or reduction of well-regulated assets, companies can utilize business assets effectively and efficiently to increase profits and reduce company expenses.

The Effect of Capital Structure on Profitability

Capital structure has negative effect on profitability. The results obtained state that capital structure has negative effect on profitability where the results of this study are consistent with research conducted by Nasimi [17], Mahardhika and Marbun [18], Solihin [19], Chandra et al. [12], and Lorenza et al. [20]. Research conducted by Haryanto [16], and Kartikasari and Merianti [2] states that capital structure has positive impact toward profitability and research conducted by Sukasa et al. [21], Azzahra and Nasib [22], and Sitorus et al. [14] states that capital structure has no negative impact toward profitability. In addition, the results of research conducted by Susetyo [11] which state that capital structure has no positive impact toward profitability.

This means that the higher the value of the capital structure of the company, the smaller the profitability of the company. The higher capital structure indicates that the company will have more funding from external parties, such as having short-term and long-term debt. If a company has more funding from long-term debt than retained earnings, then the company can suffer serious losses. Additional obligations will certainly arise when the company starts funding from outside parties, where these obligations are interpreted as costs that must be met by the company. This is of course different if the company uses funding from within the company, where additional obligations such as interest payments are not as significant as
those caused by external funding, so it can be concluded that an increase in capital structure will have a negative influence on the achievement of company profits, and vice versa.

### The Impact of Firm Size on Profitability

Firm size has a negative impact toward profitability. The results of study conducted by Lorenza et al. [20] which have the same research results which state that firm size has a negative effect on profitability. These results contradict study conducted by Miswanto et al. [23], Azzaaha dan Nasib [22], and Chandra et al. [12] which states that firm size has a positive impact toward profitability. Research conducted by Santini and Baskara [24] also shows different results stating that firm size has no effect and positive on profitability, while in research conducted by Kartikasari and Merianti [2] stated that firm size has negative impact toward profitability.

The size of a company can be viewed from the asset structure owned by the company. Company size is a benchmark for companies to see how big the company is when viewed from the total assets owned by the company itself. Company size can also show the condition of a company where a large company is believed to have larger assets in carrying out its business activities to generate greater profits. On the other hand, a larger company also has a greater opportunity for other parties to fund or invest because it is believed that the company is more stable in running its business until now. For manufacturing companies in the non-cyclical sector, the number of assets does not fully promise that it will increase the level of profit for the company. On the other hand, the addition of company assets indicates that the increasing costs that will be incurred to maintain these assets. This of course will impact the company's profit, where the profit earned will cover the need for these costs not to add to the company's profit, so in other words, the bigger the company the greater the assets owned, where this has an impact on increasing expenses for assets and will affect the company's ability to earn profits.

### 5. CLOSING

#### Conclusion

The study aims to obtain empirical evidence about the positive impact of asset management on profitability, the negative impact of capital structure on profitability, and the negative impact of firm size on profitability. The results of this research conclude that asset management has a positive impact on profitability, capital structure has a negative impact on profitability, and firm size has a negative impact on profitability.

#### Limitation

The limitations in this research are due to the fact that the independent variables used to explain the profitability in this study only three variables and the research period used only three years, namely 2018-2020. For next research, it is better to add liquidation, sales growth as independent variables. Also extend the research period.

#### Implication

The study implication is expected to help develop knowledge and knowledge about the factors that can impact company profitability. In addition, this research is expected to help increase
insight related to factors that can impact the company's profit ability, so that later company management can carry out the right strategy for the company to achieve its goals.

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https://doi.org/10.24912/ijaeb.v1.i3.1120-1132
