Effect of current ratio, total asset turnover, and size on profitability: Evidence from Indonesia manufacturing companies

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Abstract
This study aims to look at the influence of current ratio, total asset turnover (TATO), size on profitability empirical studies in manufacturing companies listed on the IDX in 2017-2020. The sample used in this study is an empirical study on manufacturing companies listed on the IDX in 2017-2020. The population in the study was 32 manufacturing companies. The purposive sampling technique used in this study had a sample number of eighteen companies in building manufacturing with a sample of 128 data. The data analysis technique used is multiple linear regression analysis with SPSS 23 software. Data analysis begins with analyzing descriptive statistics, testing classical assumptions, testing research hypotheses. The results of the study prove that current ratio, total asset turnover, and size have a positive and significant effect on the company's Return On Assets.

Keywords
current ratio (CR), size; total asset turnover (TATO); profitability (ROA)

INTRODUCTION

In today’s very tough competition, competitive advantage is required and important. This tight business competition force business actors to increase their performance. Thus, they are be able to compete and achieve the goals. Thereby, shareholders’ interest could be satisfied.

Manufacturing industry is the sectors that are efficiently expanding better than other industries in Indonesia. In addition, manufacturing sector has successfully achieved significant growth during global financial crisis. Some studies have shown many companies operating in the manufacturing industry sector is growing, especially in developing country such as Indonesia. Based on the company’s growth and performance, we can see the level of success achieved by the company in fulfilling the goals of the company.

The level of profit describes the company’s performance. It also indicates the prospect of firm in the future. Return on assets is the proxy of profitability because profitability is able to show the performance performed by a particular company which is reviewed based on the entirety of the use or functioning of the company’s assets in obtaining profit. One of the several ways to measure the efficiency of asset quantity management is by comparing the level of sales with total assets. If the asset turnover rate is high, then the use of assets of such an enterprise is also effective.

Currently, the company’s current ratio is also a problem that must be prioritized because the ratio shows that a company is able to carry out the fulfillment of financial obligations in a short period of time or immediately implement repayment. In addition, if the ratio is high, thus the ability of a company to carry out repayment of obligations or debts of a short period of time will also be greater. The current ratio owned by a company is high, indicating that there are still remaining liquid assets. Therefore, it is profitable for the company's profit because compared to fixed assets the income generated by current assets is lower.

Companies with a higher turnover rate of total assets will allow to grab external sources of funding, but the company must also pay attention to sales, so it is necessary to analyze the level of turnover of total assets. We can use the indicators of net sales and total assets of the company to calculate the total asset turnover. This calculation describes the speed of turnover of total assets over a certain period of
Thus, if the ratio owned by a company is high then the company will be even better. Large companies will have a tendency to use a larger amount of external funds, this is because the necessary funds will also increase in line with the growth experienced by a company. The size of the company will contribute to the influence on the capacity or ability experienced by a company in obtaining external funds that have the aim of carrying out funding for the company's operations. The size of the company describes the size or smallness of a company. Larger companies have more opportunities to obtain external funding in the form of large debt, thereby facilitating their operations with increased productivity and profitability.

Based on the Table 1, it shows that the average value of ROA per year from 2017-2020 in Manufacturing companies which shows a change in the level of profitability every year on the IDX which shows a downward trend, where in 2017 the amount of ROA was 5.06% then in 2018 it was 6.05% and in 2019 it was 4.03%, and in 2020 it was 0.98%. This indicates that there is a decrease in the company's ability to generate profits, while based on empirical data on the magnitude of CR, and size has a fluctuating phenomenon in contrast to ROA.

The decrease in ROA was also followed by two independent variables, namely CR, and Size which experienced an average value that increased in 2020. The movement of the magnitude of the average value that is not the same between the dependent variable (ROA) and the two independent variables affects the magnitude of the ROA. Meanwhile, the average amount of Total Asset Turnover actually shows a declining phenomenon where the amount of TATO in 2017 was 1.06% then in 2018 it was 1.08% and in 2019 it was 0.99% then in 2020 it was 0.83%. The factors that cause such differences are studied through the size of the company, as well as the company's financial ratios which include elements of liquidity, activity, solvency and profitability or rentability. The liquidity of a company reflects the company's ability to meet its short-term obligations by using its current assets. The current ratio is an indicator of the extent to which claims of short-term creditors are most commonly used (Brigham & Houston;2006). Therefore, in this paper the current ratio is used as a variable to test its effect on the company's profitability.

The profitability ratio measures the ability of a company's financial performance in making a profit (Suad Husnan, 2001). The financial performance variables used in this study were CR, TATO, and Size. The results of previous research conducted by Erni Ekawati (2004), Junus Sulistyawan (2005), Kesseven Padachi (2006), Teruel and Solano (2007), and Mehmet SEN and Eda Oruc (2009), did not state the consistency of research results that tested the influence of CR, TATO, and SIZE so that further research was needed.

**LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT**

**Current ratio (CR)**

Based on the description of the explanation by (Fahmi, 2014) explained that The Current Ratio is a measure that has the use to carry out the fulfillment of obligations or pay short-term debt, namely the capacity owned by a company in carrying out the fulfillment of obligations within maturity.

**Total assets turnover**

Syamsudin (2011) states that the total asset turnover ratio shows the efficiency of using the company's overall assets in generating a certain sales volume. If the turnover is slow, it
means that the assets owned are too large compared to the company’s sales level. The higher the turnover of total assets, the more efficient the use of these assets. According to (Dana, Made & Susanti, 2013), the results of statistical tests have no effect of Net Working Capital Turnover on Return On Total Assets. Based on the description of the explanation by Hery (2015), explaining that Total Asset Turn Over is a ratio that has the use of measuring the effectiveness of total assets in a company in causing sales activities, or the ratio used to measure how much sales per rupiah are embedded in the total assets to be generated. Total Assets Turnover shows the ability management manages all investments (assets) to generate sales. (Hantono, 2017:14).

Size

Based on the description of the explanation by (Sugiarto, 2009), explaining that the size of the company is as an agent of asymmetric information between the market and the company. This shows that if the size of the company is large, thus the organization or company will be more complex and also the cost of information will also be higher, therefore the company will have difficulty in obtaining external funds. Indicators of the size of the enterprise.

Prakoso & Chabachib. (2015) which found that the size of the company or size has a positive and significant effect on profitability. The direction of the negative coefficient signals that an increase in the amount of Total Assets, will lead to a decrease in the profitability of the enterprise

Effect of current ratio on profitability

According to (Ginting & Anggereresia, 2015), the current ratio has no partial effect on return on assets. Meanwhile, according to (Najoan & Holly, 2016) there has been a negative relationship between the current ratio and profitability or return on assets. In contrast, according to (Alavinasab & Davoudi, 2013), a significant relationship was found between the current ratio and the return on assets (ROA).

H1: Current ratio has a significant and negative effect on return on assets (ROA)

Effect of total asset turnover on profitability

According to (Indriyani, 2017) the greater the Total Asset Turnover has positive relationship with profitability since the assets used to support sales activities will be more effective. Based on research (Budiang, 2017) Total asset turnover shows a company that is increasingly current in obtaining sales results from all assets owned by the company. The increase in this ratio shows the company’s success in using its assets when obtaining sales results. so that the increase in the amount of profit obtained, the ROA will also increase

H2: Total asset turnover has a significant positive influence on profitability (ROA).

Effect of size on profitability

Research (Sunarto & Budi, 2009) in (Prakoso & Chabachib, 2015) found that company size or size has a positive and significant effect on profitability. The direction of the negative coefficient signals that an increase in the amount of total assets, will lead to a decrease in the profitability of the company.

H3: Size has a significant positive influence on return on assets (ROA).

METHODS

This research applies quantitative research methods. As stated (Sugiyono, 2013), quantitative research can be defined as a method based on the philosophy of positivism, used to examine a sample or a certain

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### Table 2.
Sample selection

<table>
<thead>
<tr>
<th>No</th>
<th>Information</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Manufacturing companies that have been and are still listed on the IDX for the 2017-2020 period</td>
<td>128</td>
</tr>
<tr>
<td>2</td>
<td>Manufacturing companies that do not publish and publish their financial statements in full for the period 2017-2020</td>
<td>60</td>
</tr>
<tr>
<td>3</td>
<td>Manufacturing companies that experienced losses during the period 2017-2020</td>
<td>36</td>
</tr>
</tbody>
</table>
population, in general sampling techniques are taken randomly, from data collection applying data analysis research instruments that are statistical / quantitative in nature that have the purpose of testing predetermined hypotheses.

**Population and sample**

In general, the population is any subject or object that has certain characteristics and qualities that the researcher applies to be understood and then draws its conclusions. The sample, namely as of the characteristics and quantities owned, is a generalization area that includes quality objects / subjects by the population (Sugiyono, 2018).

**RESULTS AND DISCUSSION**

**Descriptive statistics**

This study used 32 companies as the final sample criteria. To present the descriptive statistical results of the data processing results is presented in Table 4. The descriptive statistical results in Table 4 of the Current Ratio (X1) variable have an average value of 372.85 times and a standard deviation of 1064,288 times, meaning that the Current Ratio with roa measurements is quite high compared to the minimum score of only - 66423 times. The TATO variable (X2) has an average value of 36624.56 times and a standard deviation of 63620,629 times, meaning that it has a very large deviation because the average score compared to its deviation is more than 1. Variable Size (X3) has an average value of 88.54 times and a standard deviation of 60,791 times, meaning that TATTOOS with ROA measurements have a fairly low average. The Variable Return On Assets (Y) has an average value of 372.85 percent and a standard deviation of 1064.288 percent, meaning that the measurement of return on assets that is an impact factor in this study is quite low compared to its maximum score of 11026 percent.

**Hypothesis testing**

Hypothesis testing begins by testing the correlation coefficient and coefficient of determination which serves to explain the model's ability to explain variations in

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicator</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>CURRENT RATIO (X1)</td>
<td>Current Assets</td>
<td>Ratio</td>
</tr>
<tr>
<td>TOTAL ASSET TURNOVER (X2)</td>
<td>Sales</td>
<td>Ratio</td>
</tr>
<tr>
<td>SIZE (X3)</td>
<td>LN Size</td>
<td>Ratio</td>
</tr>
<tr>
<td>ROA (Y)</td>
<td>Net Profit</td>
<td>Ratio</td>
</tr>
</tbody>
</table>

Table 3.
Variable measurement

<table>
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<tr>
<th>Variable</th>
<th>Indicator</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>CURRENT RATIO (X1)</td>
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<td>Ratio</td>
</tr>
<tr>
<td>ROA (Y)</td>
<td>Net Profit</td>
<td>Ratio</td>
</tr>
</tbody>
</table>

Source : Collected from various references

Table 4.
Descriptive statistical results

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>512</td>
<td>-6423</td>
<td>11026</td>
<td>372.85</td>
<td>1064,288</td>
</tr>
<tr>
<td>CR</td>
<td>512</td>
<td>1</td>
<td>1582</td>
<td>207.02</td>
<td>204,325</td>
</tr>
<tr>
<td>TATO</td>
<td>512</td>
<td>739</td>
<td>545260</td>
<td>36624.56</td>
<td>63620.629</td>
</tr>
<tr>
<td>SIZE</td>
<td>512</td>
<td>1</td>
<td>421</td>
<td>88.54</td>
<td>60.791</td>
</tr>
</tbody>
</table>

Source: Processed Output (2022)
The results of the coefficient of determination test R² = 0.438 = 44%. This shows that 44% of the variation of ROA is described by CR, Size, and TATO, while the remaining 56% is explained by other variables.

A summary of the results of data processing output in this study (Table 5 and 6) produces the following regression equation:

\[ Y = -0.040 + 0.010X_1 + 0.047X_2 + 4.840X_3 \]

A constant value of 0.040 means that the overall contribution of independent variables (CR, TATO, SIZE) has an average score that also has a positive impact on the dependent variable, namely Return On Assets.

X1: 0.010, meaning that the Current Ratio has an influence with a positive direction on the Return On Assets, if there is an increase in the current ratio by 1 unit, then the return on assets has an impact of increasing by 0.010 percent significantly.

X2: 0.047, meaning that Total Asset Turnover has an influence in a positive direction on Return On Assets, if there is an increase in Total Assets Turnover by 1 unit, then the return on assets has an impact of increasing by 0.047 percent significantly.

X3: 4.840, meaning that SIZE has an influence with a positive direction on Return On Assets, if there is an increase in Size by 1 unit, then the return on assets has an impact of increasing by 4.840 percent significantly.

The results of the first hypothesis test of the Current Ratio (X1) resulted in a significance probability of 0.000 with a regression coefficient of 0.010, this means that H1 is accepted, meaning that the Current ratio has a significant impact on the company's Return On Assets with a contribution of 1.0 percent with a significant influence. The results of the second hypothesis test on Total Assets Turnover (X2) resulted in a significance probability of 0.000 with a regression coefficient of 0.047, this means that H2 was received, meaning that total assets turnover had a significant impact on the company's Return On Assets with a contribution of 4.7 percent with a significant influence. The results of the third hypothesis test on Size (X3) resulted in a significance probability of 0.000 with a regression coefficient of 4.840, this means that H3 is accepted, meaning that Size has a significant impact on the company's Return On Assets with a contribution of 4.840 percent with a significant influence.

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X2: 0.047, meaning that Total Asset Turnover has an influence in a positive direction on Return On Assets, if there is an increase in Total Assets Turnover by 1 unit, then the return on assets has an impact of increasing by 0.047 percent significantly.

X3: 4.840, meaning that SIZE has an influence with a positive direction on Return On Assets, if there is an increase in Size by 1 unit, then the return on assets has an impact of increasing by 4.840 percent significantly.

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Current Ratio (X1) has a positive and significant effect on Return on Assets. This means that the higher the current ratio value, the more impactful the value of the company's Return On Assets increases. The results of this study are in line with previous research that...
proves that Current Ratio is a determinant that has an impact on Return On Assets. (Fahmi, 2014; Alavinasab & Davoudi, 2013) while backing the results with research (Ginting & Anggeresia, 2015; Holly & Najoan, 2016; Alavinasab & Davoudi, 2013) in measuring financial performance. High solvency performance will increase the company’s ability to obtain sources from third parties, and the company’s equity, to which users can add working capital, indicates an increase in the value of the company.

Total Asset Turnover (X2) has a positive and significant effect on Return On Assets. This means that the higher the value of total asset turnover, the more impactful the value of the company's Return On Assets. The results of this study are in line with previous research that proves that Total Asset Turnover is a determinant that has an impact on Return On Assets. (Syamsudin, 2011; Hery, 2015) while contradicting the results with research (Dana, Made & Susanti, 2013) in measuring financial performance. The Total Asset Ratio has the purpose of measuring the effectiveness of the total assets in a company in causing sales activities, or the ratio used to measure how much sales per rupiah are embedded in the total assets to be generated.

Size (X3) has a positive and significant effect on Return On Assets. This means that the higher the size value, the more it has an impact on increasing the value of the company's Return On Assets. The results of this study are in line with previous research that proves that Size is a determinant that has an impact on Return On Assets (Prakoso & Chabachib, 2015; Sunarto & Budi, 2009) the size of the company is as an agent of asymmetric information between the market and the company. This shows that if the size of the company is large, thus the organization or company will be more complex and also the cost of information will also be higher, therefore the company will have difficulty in obtaining external funds. Indicators of the size of the firm.

**CONCLUSION**

This study aims to identify the impact of Return On Assets to provide empirical evidence of financial performance in Manufacturing Companies listed on the Indonesia Stock Exchange in 2017. The results of the study prove that the Current Ratio, Total Asset Turnover, and Size have a positive and significant effect which has an impact on the company’s Return on Assets. These three financial ratio factors contributed 18.7 percent which had an impact on the company’s Return On Assets.

Further research can further deepen empirical studies on other antecedent factors that have an impact on the return on assets (ROA) of the company in addition to the Current Ratio, Total Asset Turnover, and Size of the company because the contribution to the results of the coefficient of determination is only able to explain the ROA of 18.7 percent, so that the remaining 81.3 percent can involve measuring other financial and proxy ratios such as company size, good corporate governance, dividend policy, other measurements that have more impact on the company's return on assets.

**REFERENCES**


