Fundamental Analysis of Firm Performance of Publicly Listed Manufacturing Companies in Indonesia

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ABSTRACT
The study was carried out with the goal of obtaining empirical evidence about the fundamental analysis factors in the form of financial ratio, sales growth, and firm size that affect firm performance of manufacturing companies listed on the Indonesia Stock Exchange (IDX) between 2017 and 2019. This study used financial statement data from the IDX's official page and the firm's official page. The purposive sampling technique was used in this study, with a total of 178 samples from manufacturing sector companies. SPSS 17 and Microsoft Excel 2010 software were used to process and test the data. According to the findings of this study, capital structure and sales growth has no negative significant effect on firm performance, while sales growth and Total Asset Turnover Ratio has a positive significant effect on firm performance.

Keywords: Fundamental Analysis, Sales Growth, Firm Size, Firm Performance

1. INTRODUCTION

Competition in the business world is increasingly spurring creativity because today's business has become very competitive caused by trends such as globalization, innovation, and creativity. These trends also ride the industrial revolution, known as the modern industrial age, which has evolved in the 4th stage. The Industrial Revolution 4.0 has had an impact on various sectors. One of the sectors that must improve product quality and governance through adaptation is the company or what is commonly known as a commercial organization.

Adaptation in improving product quality, technological transformation, and revising performance by the company has an interconnected common thread: developing competitiveness in a competitive business environment by struggling through revolutionary strategies. The revolutionary strategies are believed to maintain and even improve the company's performance in the coming period.

Firm performance, in general, has a definition in the form of output from management performance that has been carried out, which aims to achieve financial and non-financial results. In general, the most effective method in assessing a company's performance is fundamental analysis. Fundamental analysis is a type of method supported by [1] in assessing company performance because the results of fundamental analysis will be in the form of financial ratios, which can later be compared from period to period to see an increase or decrease in company performance.

Many independent and dependent variables can be used to analyze the fundamentals of the firm performance. However, this study only uses the independent variable capital structure with the proxy Debt-to-Equity Ratio (DER), firm size, sales growth, and Total Asset Turnover Ratio (TATO) which will affect the firm performance by using one of the profitability ratios, namely Return on Equity (ROE).

This study uses manufacturing companies listed on the Indonesia Stock Exchange (IDX) as the population. The use of manufacturing companies as a population because the manufacturing sector in Indonesia from 2017 to 2019 was experiencing a slowdown in production growth. This production...
slowdown began when entering 2017, where growth was only 4.74%, continued in 2018 at 4.07%, and in 2019 at 4.01% [2]. Another reason for the use of manufacturing companies in this study is that this sector is the largest contributor to Gross Domestic Product (GDP) in a row from 2017 to 2019 with a figure of 20.16% in 2017 [3], 19.86% in 2018 [4], and 17.58% in 2019 [5]. This was partly due to the ability of the manufacturing sector to become the driving force of national exports in those 3 years with a percentage of 76% [3], 72.19% [4], and 75.5% [5].

According to the previous studies, there are still the difference result. First, research conducted by [6], [7], and [8] shows a negative influence between debt-to-equity ratio and ROE. The research also obtained a negative but insignificant effect [9]. Contrary to the results obtained [10], which show a significant positive effect to company performance. While the positive results were not significant [11].

The study results [12] showed an insignificant negative effect between sales growth and ROE. Not in line with the significant negative results, [13] and [14] obtained significant positive research results. The positive result between the two variables was supported by [15].

The research conducted by [14] and [16], the results show a significant negative influence between firm size and ROE. [17] also obtained a negative result in the influence between the two variables. On the other hand, a positive and insignificant influence was shown [18]. Supported by [6] and [13] with the result is that there is a significant positive influence. A positive influence is also produced by [19].

[20] obtained research results that there is a negative influence between TATO and ROE. Supported by research [12] in the absence of a significant negative influence with ROE. However, [15] obtained positive results on ROE which is also supported by [21] the existence of a significant positive influence. Consistent so that this study was conducted to re-examine the factors that affect the company's performance.

2. LITERATURE STUDY

2.1. Trade-Off Theory

Trade-off theory, or what can be called the theory of trade-off, generally has a focal point related to costs and benefits. This can be seen through the company's debt financing on the company's performance because the Debt-to-Equity Ratio is involved in the company's efforts to optimize the target of the trade-off between the tax benefits of debt and the cost of paying interest [8]. This theory refers to company's financing choices by making cost savings associated with borrowing through interest on debt and tax savings. The actual use of trade-off theory can be seen through the decisions made by managers within a company regarding funding in the form of debt by considering the factors of cost and benefit. When the interest payment or interest cost of the debt paid by the company is getting bigger, the company will get benefits from tax payments. However, interest costs from financing this debt will later affect the company's Income Statement or what is known as a comprehensive income statement in the interest section.

2.2. Resource-Based View Theory

Theory of resource-based view, is a theory that believes that the characteristics and the company's internal factors are considered capable of being one of the supporters of the company's performance and capable to be company's strength, especially profitability [22]. Therefore, the company's performance can be optimized by focusing more attention on its resources, especially those involving internal factors, because of excellent and maximum utilization. This theory is the idea of management as a competitive advantage which is an essential factor because it is believed to have value-added and a more dominant strategy than its external resources. The resource-based view theory also explains the importance of an organization's ability to manage internal resources through strategies that have never been adopted before by current or future competitors or appropriate strategies [22]. If examined in more depth, this theory encourages companies to manage resources that have characteristics such as rare, valuable, cannot be imitated perfectly, cannot be replaced [22], and

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manage their capabilities as efficiently as possible. Therefore, it will lead to a better company performance.

2.3. Firm Performance

Generally, firm performance is the company's ability to reflect its performance based on specific standards or criteria in realizing its resources, including human resources and material resources, at a particular time. Fundamental analysis of the company's financial performance is considered a tool for decision-making for users of financial statements, one of the users is company management [23]. The purpose of conducting fundamental analysis, in general, is to examine the efficiency of the utilization of company resources from the rate of return on investment of existing resources. The efficiency of the utilization of company resources can be seen from the profitability ratio using the Return on Equity (ROE) ratio. In general, ROE is the interpretation of financial ratios which explain the amount of profit or return generated from a company in net income through the management of capital or equity funds. The general objective of the Return on Equity ratio is to see the maximization of the use of equity which can generate net income so that it can be predicted whether the business feasibility will be able to survive for the next several years through a ratio comparison from year to year or known as the time series method.

2.4. Capital Structure

According to [24], companies have needs in carrying out their operational activities. This need is in the form of long-term and short-term funds that aim to cover all or part of the required funds. A reasonable capital structure measurement can be done through one of the solvency ratios, the Debt-to-Equity Ratio (DER).

Through the trade-off theory, it can be concluded that there is an exchange between the tax benefits of debt and the cost of paying interest where this interest cost will affect net income on the income statement. The company's obligation to make interest payments will later have an impact on a decrease in Return on Equity (ROE), which is the dependent variable in this study.

H$_1$: Capital structure has a significant negative effect on firm performance

2.5. Sales Growth

Sales growth is the change in the number between this year's sales and the previous year so that it can be interpreted as growing upwards if this year's figure is greater than the previous year. [25] states that firm growth can be measured through sales growth which is usually known as a proxy with a change in the number of sales from one period to another or from time to time. This increase in sales will be one of the competitive advantages for a company because there will be a good impact on net income due to an increase in sales if there is a positive growth in sales.

H$_2$: Sales growth has a significant positive effect on firm performance

2.6. Firm Size

Firm size, in general, aims to determine the size of the company, which will later affect performance, decisions, and corporate governance. According to [26], a larger company has less motivation to carry out creative accounting practices and has a greater motivation to increase the quality of the annual company financial reports from larger organizations. This greater company motivation is caused by the condition of a more stable or established commercial organization so that it is considered more committed to continuously improving its performance [18]. According to [26], proxies that can be used to assess company size are log size, stock market value, total assets, and others. The size of a company can also be seen based on total assets, the number of sales, average sales, and average total assets. Based on the description above, it can be obtained that one common thread is that many proxies can be used to measure firm size. The proxy for the total asset log will be used as an independent variable from the firm size in this study. According to [18], the use of natural
logarithm conversion aims to avoid differences in the size of a company that is too small or too large to tens of millions so that it can create normal distribution data from total assets.

A larger company size is one of the competitive advantages, which is also part of the resource-based view theory component. Therefore, this competitive advantage can be a positive factor in triggering better financial reports and leading to better company performance.

**H3:** Firm size has a significant positive effect on firm performance

### 2.7. Total Asset Turnover Ratio

Firm Total Asset Turnover Ratio aims to determine how efficient a company's assets are in generating sales or revenue. In short, stakeholders usually use TATO to determine the company's ability to convert its assets into cash.

According to [15], a high ratio of asset turnover will give an understanding that the greater the growth potential of a company is related to expanding its market share and increasing sales of a company which can ultimately improve financial performance as well as company performance. The efficiency of the use of assets in obtaining revenue is one of the competitive advantages which is also part of the resource-based view theory component. Therefore, this competitive advantage can be a positive factor in triggering better financial reports and will positively affect the company's performance.

**H4:** Total Asset Turnover Ratio has a significant positive effect on firm performance

### 2.8. Framework of Thinking

The following explains the thinking framework based on the research model and explanation provided above:

![Framework of Thinking](image_url)

**Figure 1 Framework of Thinking**

### 3. METHODOLOGY

The technique of multiple linear regression analysis is used in this study. The research's population is manufacturing sector companies listed on the IDX from 2017 to 2019. The research sample was obtained using a nonprobability sampling technique with a purposive sampling method. The criteria are: a. Manufacturing firms listed on the IDX from 2017 to 2019, b. Companies that present financial statements in rupiah (IDR), c. Companies that earned net income from 2017 to 2019, d. Companies that publish financial statements every December 31, e. Manufacturing companies that IPO before 2017. Manufacturing companies that IPO in 2017 are eliminated because one of the independent variables of this research is sales growth. According to the operationalization of variables, data from sales growth in 2016 is needed. However, companies that have just IPO in 2017 have not generally published their 2016 annual financial statements because the company IPO in 2017, so there is no sales data in 2016. Based on these criteria and reduced by outlier data, a sample of 178 data was obtained. The data in financial reports were processed with SPSS 17 and Microsoft Excel 2010.
Firm performance is measured by Return on Equity (ROE). ROE is the ratio of net income with total equity.

\[ ROE = \frac{\text{Net Income}}{\text{Total Equity}} \]

Capital structure is measured by Debt-to Equity (DER). DER is the ratio of total debt with total equity.

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

Changes in sales measure sales growth. It uses sales from the previous year and the current year.

\[ Sales \text{ Growth} = \frac{Sales (t) - Sales (t - 1)}{Sales (t - 1)} \]

Firm size is measured by total asset. Furthermore, it will be converted by using log.

\[ Firm \text{ Size} = \log (\text{Total Asset}) \]

Total Asset Turnover Ratio is measured by the ratio of sales with total asset. TATO aims to find out how efficiently total assets are used to generate income.

\[ TATO = \frac{\text{Total Sales}}{\text{Total Assets}} \]

| Table 1 Results of The Proxy for Each Variables |
|---|---|---|---|
| Variables | Scale | Measurement | Ref |
| ROE | Ratio | Net Income / Total Equity | [17] |
| DER | Ratio | Total Debt / Total Equity | [11] |
| Sales Growth | Ratio | \(\frac{Sales (t) - Sales (t - 1)}{Sales (t - 1)}\) | [13] |
| Firm Size | Ratio | \(\log (\text{Total Asset})\) | [17] |
| TATO | Ratio | Total Sales / Total Asset | [21] |

4. RESULT AND DISCUSSION

The valid and used data are 178 data from the manufacturing sector in the period 2017 to 2019. There are 5 variables studied, consisting of 1 dependent variable, namely firm performance, and 4 independent variables, namely capital structure, sales growth, firm size, and Total Asset Turnover Ratio.

According to descriptive statistical testing, the capital structure variable has a maximum value of 5.4426 and a minimum of 0.0713. The average value of the capital structure is 0.792840, and the standard deviation is 0.7289218. The sales growth variable has a maximum value of 0.8589 and a minimum of -0.4376. The average value of sales growth is 0.092287, and the standard deviation value is 0.1622245. The firm size variable has a maximum value of 7.9847 and a minimum value of 5.2029. The average value of the company size is 6.440182, and the standard deviation value is 0.6366460.
The variable Total Asset Turnover Ratio has a maximum value of 6.3327 and a minimum of 0.3119. The average value of the Total Asset Turnover Ratio is 1.050127, and the standard deviation value is 0.6542993. The company's performance variable has a maximum value of 0.3846 and a minimum of 0.0009. The average value of the company's performance is 0.111339, and the standard deviation value is 0.0793838.

According to classical assumption test, the results of normality testing in the Unstandardized Residual column in this study obtained a significance level of 0.051, which exceeds the 0.05 significance level so that the regression model in this study has met the requirements for normality testing. The multicollinearity test can be seen from the Collinearity Statistics test through the Tolerance and Variance Inflation Factor (VIF) values. The VIF figures for capital structure, sales growth, firm size, and Total Asset Turnover Ratio are 1.293, 1.240, 1.002, and 1.396, respectively. These numbers < 10, which means that the regression model is free from multicollinearity. Tolerance figures for capital structure, sales growth, firm size, and Total Asset Turnover Ratio are 0.773, 0.807, 0.998, and 0.716, respectively. These numbers > 0.1, which means that the multiple linear equations of this study are free from multicollinearity. The results of the heteroscedasticity test for the variables of capital structure, sales growth, firm size, and Total Asset Turnover Ratio are 0.340, 0.078, 0.196, and 0.486, respectively. These numbers > 0.05 mean that the regression model is free from heteroscedasticity. The regression model free from autocorrelation is the Durbin-Watson number between -2 and 2, and the Durbin-Watson value in this study is 0.994, so this regression model is good because it is free from autocorrelation.

This study's correlation value (R) is 0.527, closer to one, meaning a reasonably strong correlation between the independent variables: capital structure, sales growth, firm size, and Total Asset Turnover Ratio on the dependent variable: company performance. The coefficient of determination (Adj R²) of 0.278 shows 27.8% of the contribution of the influence of the independent variables, namely capital structure, sales growth, firm size, and Total Asset Turnover Ratio simultaneously on the dependent variable, namely company performance. In comparison, the remaining 72.8% is explained by other variables not disclosed in this study.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>(constant)</td>
<td>-.194</td>
<td>.053</td>
</tr>
<tr>
<td>Capital Structure</td>
<td>-.015</td>
<td>.008</td>
</tr>
<tr>
<td>Sales Growth</td>
<td>-.019</td>
<td>.035</td>
</tr>
<tr>
<td>Firm Size</td>
<td>.040</td>
<td>.008</td>
</tr>
<tr>
<td>TATO</td>
<td>.056</td>
<td>.009</td>
</tr>
</tbody>
</table>

Source: SPSS 17 data processing result

Based on the data from Table 1, the regression equation is constructed as follows:

\[ PP = -0.194 - 0.015 SM - 0.019 SG + 0.04 FZ + 0.056 TATO + \varepsilon \]

whereas:

PP : Firm Performance
SM : Capital Structure
SG : Sales Growth

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4.1. The Effect of capital structure on Firm Performance

The results of statistical testing with the t statistical test show that the coefficient number of -0.015 in column B means that the independent variable capital structure has a negative effect and direction, and \( H_1 \) is rejected because the significant value is 0.066, which means > 0.05 so that the capital structure variable has a negative effect and not significant to the company's performance (ROE). The negative relationship between capital structure (Debt-to-Equity) and firm performance (Return on Equity) is based on the Trade-Off Theory (trade-off between the tax benefits of debt and the cost of paying interest).

This result is in line with research conducted by [9]. However, this result contradicts research conducted by [11] which states that DER has a positive and insignificant effect on firm performance. This result is also not in line with the research conducted by [10] stated that there is a significant positive influence between DER and firm performance. The result in the form of a negative influence between DER and firm performance was also obtained by [6], [7], and [8], thus contradicting the result of this study.

4.2. The Effect of Sales Growth on Firm Performance

The results of statistical testing with the t statistical test also show that the coefficient number of -0.019 in column B means that the independent variable sales growth has a negative effect and direction, and \( H_2 \) is rejected because the significant value is 0.597, which means > 0.05 so that the sales growth variable has a negative effect and insignificant to the company's performance (ROE). The negative and insignificant influence between sales growth and firm performance (Return on Equity) is based on the reason that sales growth will automatically increase the cost of sales or revenue expenditure. This increased cost will later lead to a decrease in the company's net income so that sales growth does not have a significant negative effect on ROE.

This result is not in line with research conducted by [13], [14], and [15] that there is a significant positive influence between sales growth and Return on Equity. However, this result is in line with [12], which states an insignificant negative effect between sales growth and Return on Equity.

4.3. The Effect of Firm Size on Firm Performance

The results of statistical testing with the t statistical test show that the coefficient number of 0.040 in column B means that the independent variable firm size has a positive influence and direction, and \( H_3 \) is accepted because the significant value is 0.000, which means < 0.05 so that the firm size variable has a significant positive effect on firm performance (ROE). There is a significant positive effect between firm size and firm performance (Return on Equity) because it is based on the Resource-based View Theory. The larger a company is, the more investment in equipment and technology is much more advanced or up-to-date than in smaller companies. This is because larger companies have the resources to invest (have a competitive advantage). Larger companies can obtain higher production capacity through more advanced equipment and technology. Higher production will trigger higher sales and later affect better performance due to higher returns.

This result is in line with research conducted by [13], [19] and [27]. However, this result contradicts the research conducted by [14], [16], and [17] stated that there was a significant negative effect between firm size and ROE. Also, it contradicts the results obtained from [6] and [18] stated no positive influence between the two variables.

4.4. The Effect of Total Asset Turnover Ratio on Firm Performance

A positive and significant influence between TATO and firm performance (Return on Equity) because it is based on the reason that the more efficient use of assets in obtaining revenue will be one
of the competitive advantages for the company so that management considers that it can have a good effect on firm performance. The results of statistical testing with the t statistical test also show that the coefficient number of 0.056 in column B means that the independent variable Total Asset Turnover Ratio has a positive influence and direction, and $H_4$ is accepted because the significant value is 0.000, which means < 0.05 so that the Total Asset Turnover Ratio has a positive and significant effect on firm performance (ROE).

This result is not in line with research conducted by [12] and [20] in the form of an insignificant negative effect between the TATO and ROE variables. However, the results of this study are in line with research conducted by [11] and [15] that TATO has a significant positive effect on the company's Return on Equity.

The significant number of the F statistical is 0.000, which means this figure is smaller than the significance level of 0.05 or 5%. Therefore, in this study, there is a significant influence between the independent variables in capital structure, sales growth, firm size, and Total Asset Turnover Ratio on the dependent variable (firm performance) simultaneously or together.

5. CONCLUSION AND SUGGESTION

5.1. Conclusion

Based on the research results above, it can be concluded that the variables of capital structure and sales growth have a negative and insignificant effect on firm performance (Return on Equity) in manufacturing companies listed on the Indonesia Stock Exchange for the period 2017 to 2019. In addition, the firm size variable and Total Asset Turnover Ratio have a significant positive effect on firm performance (Return on Equity) in manufacturing companies listed on the Indonesia Stock Exchange for the period 2017 to 2019.

Every research is certainly not free from limitations, even though this research has been attempted to be carried out following scientific procedures that have been generally established. Therefore, it is better if the limitations listed below can be reviewed and used as input for presenting research on similar topics that are even better. The limitations of this study are as follows: a. the companies used in this study only include manufacturing companies listed on the Indonesia Stock Exchange (IDX) so that the results of this study cannot represent all companies listed as a whole in Indonesia, b. this study only examines the period 2017 to 2019. Therefore, the results of this study only provide an overview of trends in that period, c. This study only uses four independent variables: capital structure (DER), sales growth, firm size (logTA), and Total Asset Turnover Ratio.

5.2. Suggestion

Every research generally requires suggestions to accelerate further research to make it even better. Based on the description of the limitations that have been described, this study has the following suggestions: a. consider using a more extended period of a year through expanding the observation period so that the number of manufacturing companies can be more observed, b. considering the use of other listed sectors that publicly listed in Indonesia so that the sample is much larger even though filtered by sample criteria, c. consider using other fundamental analysis variables to predict their effect on firm performance.

Companies and investors need to pay attention to the company's size, which has a significant effect to Return on Equity. Hence, a giant firm is more committed to continuously improving its performance. A company trying to improve its performance will certainly affect the efficiency or effectiveness or a broader market coverage of the company. It will affect the numbers in the income statement, which will be even better. Companies are expected to pay attention to the Total Asset Turnover Ratio, which significantly relates to ROE. Hence, the more efficient the use of assets in obtaining revenue, it will become one of the competitive advantages for the company.
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