



FACTORS AFFECTING RETURN ON ASSETS IN IDX-LISTED

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Abstract: This research begins with the plastic industry that is increasingly available on the Indonesia Stock Exchange, as seen by the increase in several plastic companies listed on the Indonesia Stock Exchange and the addition of foreign market share, namely Chinese products. This study aims to analyze the extent to which the performance development of plastic companies in Indonesia is seen from the Return on Assets as the dependent variable. While the independent variables of this study are Current Ratio, Total Asset Turnover, Debt Ratio, and Gross Profit Margin. The research method used in this study is a quantitative method, where this study has a sample of 207 data from 10 companies listed on the Indonesia Stock Exchange, with the period 2012 to 2019, and financial reporting is carried out during the quarter, where this study uses the normality test, multicollinearity test, heteroscedasticity test, autocorrelation test, t-test, and F test. The results of this study are Current Ratio, and Total Asset Turnover has an effect on Return on Assets. On the other hand, the Debt Ratio and Gross Profit Margin variables have no effect on Return on Assets.

Keywords: Current Ratio; Debt Ratio; Gross Profit Margin; ROA; Total Asset Turnover

INTRODUCTION

This research's background is based on the increasing number of companies engaged in the plastic industry on the Indonesia Stock Exchange in recent years. This encourages the author to do more detailed research on the factors that affect the performance of several companies engaged in the plastic industry, plus the entry of foreign market shares, namely China to Indonesia, with a wide variety of plastic products that offer more competitive prices. For this reason, the competition in the plastic industry has been tremendous in recent years.

This study aims to analyze whether the entry of foreign market share, namely China, affects the performance of plastic companies listed on the Indonesia Stock Exchange. This study also wants to analyze the factors that affect return, seen from Return on Assets, and this research is increasingly encouraging investors to be wiser in viewing financial statements.

Company performance is usually measured by the extent to which the company generates profits. The greater the profit generated by the company, the more positive response will be to investors. Some investors generally look at the financial statements from the income statement and immediately assess whether the company is worth investing in or not. Many components can be seen by investors and the income statement, for example, the balance sheet in the financial report. Based on this, the researcher wants to analyze the effect of Current Assets, Total Asset Turnover, Gross Profit Margin on Return on Assets.

The Current Ratio is an indicator used by the company if you want to analyze its short-term performance. Generally, the time used is approximately one year. Research results according to Afriyanti & Chabachib (2011) current ratio harms Return on Assets. Research results according to Wicaksono (2017), Nuryani & Sunarsi (2020) states that



the current Ratio has an impact on profitability, while research by Supardi et al., (2018), Pongrangga (2015), and Darmawan et al. (2013) state that the current Ratio shows insignificant results on Return on Assets. From several previous studies, the research hypothesis is:

H1: Current Ratio has an effect on Return on Assets.

Total Asset Turnover is asset turnover, namely inventory related to sales. The increase in sales is directly proportional to the increase in total asset turnover. This total asset turnover is often used as a benchmark in measuring a company's ability to the company's working capital. The research results by Afriyanti & Chabachib (2011), Sari & Budiasih (2014) show that total asset turnover affects return on assets. From several previous studies, the research hypothesis is:

H2: Total Asset Turnover has an effect on Return on Assets.

Debt Ratio, known as the ratio related to its ability to pay its debts to several parties. This debt ratio is usually associated with assets, where the company's assets can be used as a benchmark or guarantee to the debtor. The research results of Darmawan et al. (2013) and Barus (2013) show that the debt ratio affects return on assets. From several previous studies, the research hypothesis is:

H3: Debt Ratio has an effect on Return on Asset.

Gross Profit Margin is one of the components in the income statement. This gross profit margin is also the gross profit after deducting the cost of goods sold. As the gross profit margin increases, the company's sales will increase. The research results by Nariswari & Nugraha (2020), Nuryani & Sunarsi (2020) show that gross profit margin has a positive effect on profit growth. Meanwhile, Bionda & Mahdar (2017) research shows that gross profit margin has no impact on profit growth. Researchers have not found any research related to gross profit margin affecting return on assets. So the researcher, interested in making a hypothesis, is as follows:

H4: Gross Profit Margin has an effect on Return on Assets.

METHODS

This study examines the effect of the independent variable (current ratio, total asset turnover, debt ratio, and gross profit margin) on the dependent variable (return on assets). This study examines the effect of the independent variables (current ratio, total asset turnover, debt ratio, and gross profit margin) on the dependent variable (return on assets). This research was inspired by Silalahi (2020), then developed in terms of variables and years of research and this form of research uses causality research. The subjects of this study were plastic and packaging companies listed on the Indonesia Stock Exchange from 2012 to 2019. The sample selection used the purposive sampling method, which is a technique that deliberately takes certain samples according to the required needs, which include: characteristics wherein in this case the sampling must also reflect the sample population itself (Blumberg et al., 2014). The form of this research uses causality research. This research's subjects are plastic and packaging companies listed on the Indonesia Stock Exchange from 2012 to 2019. The sample was selected using the purposive sampling method, which is a technique that deliberately takes specific samples according to the needs needed, which includes: characteristics where in this case, sampling must also reflect the sample population itself (Blumberg et al., 2014).

This study's data are secondary data obtained through the Indonesia Stock Exchange and the RHB Sekuritas application. This study uses a multiple linear regression model, where before that, the classical assumption test (normality test, multicollinearity test, autocorrelation test, and heteroscedasticity test) was carried out.



This study uses SPSS in analyzing data. The variables in this study consisted of independent and dependent variables. This study has three independent variables: the variable current ratio, total asset turnover, debt ratio, and gross profit margin.

According to Afriyanti & Chabachib (2011), the current ratio variable is formulated by,

$$\text{Current Ratio} = \frac{\text{Current Asset}}{\text{Current Liabilities}}$$

According to Afriyanti & Chabachib (2011), the total asset turnover variable is formulated by,

$$\text{Total Asset Turnover} = \frac{\text{sales}}{\text{Total Asset}}$$

According to Gunawan (2019), the debt ratio variable is formulated by,

$$\text{Debt Ratio} = \frac{\text{Total Debt}}{\text{Total Asset}}$$

According to Nariswari & Nugraha (2020), the gross profit margin variable is formulated by,

$$\text{Gross Profit Margin} = \frac{\text{Net Sales} - \text{COGS}}{\text{Net Sales}}$$

Meanwhile, according to Erari (2014) the dependent variable, namely the return on assets variable is formulated with,

$$\text{Return on Assets} = \frac{\text{Net Profit}}{\text{Total Assets}}$$

RESULTS AND DISCUSSION

This study's data populations were plastic and packaging companies listed on the Indonesia Stock Exchange from 2012 to 2019. There were 10 samples of plastic and packaging companies whose financial reporting was conducted quarterly. From these samples, 320 samples were collected. Then the 320 samples are tested for normality, and the results of the data are not normal, and it is necessary to transform the data with SPSS and produce 207 data samples. Then the 207 samples of the data were tested for normality. The results were that the five variables had a sig value > 0.50, which means that the five variables were normally distributed.

Table 1. Normality Test

	Kolmogorov-Smirnov	
	Df	Sig.
Ln_CR	207	0,73
Ln_TOT	207	0,88
Ln_DR	207	0,65
Ln_GPM	207	0,85
Ln_ROA	207	0,71

Resource: SPSS data processing version 25 (2021)



Table 2. Multicollinearity Test

Constan	Collinearity Statistics	
	Tolerance	VIF
CR	0,894	1,118
TOT	0,935	1,070
DR	0,947	1,056
GPM	0,924	1,082

Resource: SPSS data processing version 25 (2021)

Based on the multicollinearity test table, it was found that a low tolerance value and a VIF value > 1 means that in this study no multicollinearity test showed no correlation between variables.

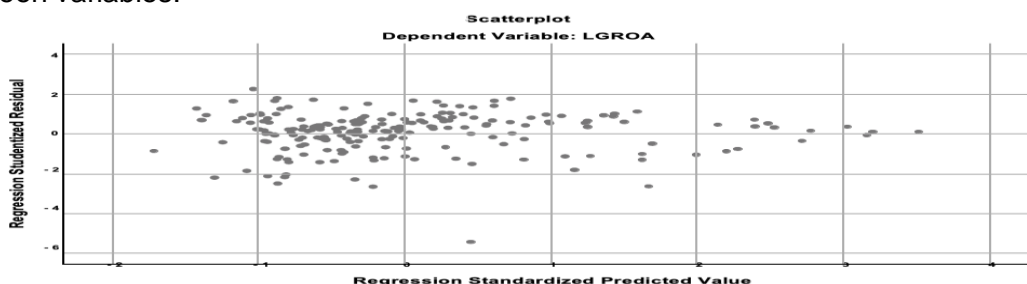


Figure 1. Heteroscedasticity Test

Resource: SPSS data processing version 25 (2021)

In the figure above, to test for heteroscedasticity using a scatter plot, the results of the study show that there is no specific pattern, which means that there is no heteroscedasticity between the dependent and independent variants, which means that each variable in this study does not experience discomfort between variances. between variables.

Table 3. Autocorrelation Test

N	4-dl	4-du	Durbin-Watson
207	2,273	2,191	2,012

Resource: SPSS data processing version 25 (2021)

This study used an autocorrelation test using the Durbin-Watson method. Based on the table above, the Durbin-Watson value < 4-du is obtained, which means that in this study there was no autocorrelation between the research variables.

This research uses multiple linear regression models, the following research model is attached:

$$Y = 6,423 + 1,069 X_1 + 5,087 X_2 + 0,0037 X_3 - 0,001 X_4 + e$$

Information:

Y = Return On Asset

α = Constanta : 6,243 indicates that the variable current ratio, total asset turnover and debt ratio, if the value is 0 then the return on assets will increase by 6,243.

β₁–β₄ = Coefisient Regresi : The coefficient value of CR (β₁) is 1,069 with a positive value. This means that for every increase in the Current Ratio of 1 time, Return on Assets (ROA) will increase by 1,069 assuming the other variables are constant. The coefficient of TOT (β₂) is 5,087 with a positive value. This means that for every increase in Total Asset Turnover of 1 time, Return on Assets (ROA) will increase by 5,087 assuming the other variables are constant. The



DR coefficient (β_3) value is 0.0037 with a positive value. This means that for every 1 increase in Debt Ratio, Return on Assets (ROA) will increase by 0.0037, assuming the other variables are constant. The GPM coefficient (β_4) value is -0,001 with a positive value. This means that for every 1 increase in Gross Profit Margin, Return on Assets (ROA) will decrease by 0.001, assuming the other variables are constant.

- X1 = Current Ratio
- X2 = Total Asset Turnover
- X3 = Debt Ratio
- X4 = Gross Profit Margin
- e = Standart error

Table 4. T-Test

Model	t	Sig
Constant	73,928	0,000
CR	3,994	0,000
TOT	5,943	0,000
DR	1,580	0,116
GPM	-0,166	0,868

Resource: SPSS data processing version 25 (2021)

Based on table 4, the results of the t-test, the variable current ratio, and total asset turnover have a significance value below 0.05, which means that the current ratio and total asset turnover variables affect the return on assets variable. Meanwhile, the debt ratio's significance value and gross profit margin are above 0.05, which means that the debt ratio and gross profit margin variables do not affect the return on assets.

Based on the research above, the results of hypothesis 1 are the same as those of Afriyanti & Chabachib (2011) and Wicaksono (2017), where the current ratio affects return on assets. This indicates that the increase in current assets will increase profitability, and also current assets are part of total assets, so this has a significant effect. Also, high current assets will get great trust from creditors, meaning that the company has many liquidity funds in running its company.

Based on the research above, the results of hypothesis 2 are the same as those of (Afriyanti & Chabachib, 2011), Sari & Budiasih (2014), where total asset turnover affects return on assets. This indicates that the increasing total set turnover will increase the return on assets. Also, the total turnover in this study is directly related to sales. Where increased sales will affect the asset itself. Asset here is not only in terms of inventory, but also equipment in producing goods to be sold.

Based on the research above, the results of hypothesis 3 are not the same as the Darmawan et al. (2013) study and Barus (2013), where the debt ratio does not affect the return on assets. This is because the debt component in this study is short debt, so it does not affect assets. As we know, buying assets usually uses a long-term debt component. So, if the debt used is short-term debt by the company, it will not affect return on assets.

Based on the research above, the results of hypothesis 4 are the same as those of Bionda & Mahdar (2017), where the gross profit margin does not affect the return on assets. Because the gross profit margin is part of the profit itself, so it will not affect the return on assets.



Table 5. F-test

F	Sig
15,865	0,000

Resource: SPSS data processing version 25 (2021)

Based on table 5, the f test results obtained a significance value below 0.05, which means that the variable current ratio, total asset turnover, debt ratio, and gross profit margin (independent) together affect the variable return on assets (dependent). That is, in this study as a whole this research model is fit.

CONCLUSION

The conclusion in this study is that the variables that will affect the return on assets are the variables that are part of the assets and affect the return obtained by the company, such as the current ratio and total assets turnover, regardless of the influence of an unstable world. This is because the sample in this study is a manufacturing company, where manufacturing companies have short business processes such as service companies, and manufacturing companies are also required to have more assets to support the company's operational activities.

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