Perwira International Journal of Economics & Business (PIJEB)
Received, January 2022
Revised, June 2022
Accepted, July 2022
https://ejournal.unperba.ac.id/index.php/pijeb

ANALYSIS OF THE EFFECT OF LONGTERM DEBT, SHORT TERM DEBT, TOTAL DEBT ON FINANCIAL PERFORMANCE IN MANUFACTURING COMPANIES LISTED ON THE IDX

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ABSTRACT

This research aims to investigate the effect of Long Term Debt, Short Term Debt, and Total Debt on Return on Equity (ROE) in manufacturing companies listed on the Indonesia Stock Exchange (BEI). The data used are the company's annual financial reports for the period 2018 - 2020. The panel regression analysis method is used to evaluate the relationship between long-term debt, short-term debt, and total debt variables with the company's ROE. The research results show that Long Term Debt has a negative and significant influence on ROE, indicating that the use of long term debt can reduce the rate of return on a company's own capital. On the other hand, Short Term Debt does not have a significant effect on ROE. However, Total Debt shows a negative and significant influence on ROE, indicating that too much dependence on debt can reduce the company's rate of return on its own capital. These findings provide valuable insights for company management in managing their capital structure to achieve optimal profit levels.

Keywords: Long-term debt; Short-term debt; Total Debt; Return on Equity

INTRODUCTION

Every company aims to maximize the value of the company or the wealth of the company owner. The company's financial performance is a benchmark for the success of the company's performance. According to the Indonesian Accountants Association (IAI) (2007), financial performance is a company's ability to manage and control the resources it owns. Meanwhile, according to Sucipto (2013), financial performance is the determination of certain measures that can measure the success of an organization or company in generating profits.

Fahmi (2011)said that financial performance looks at the financial reports of the company/business entity concerned and this is reflected in the information obtained on *the balance sheet* , *income statement* (profit and loss report), and *cash flow statement* (cash flow report).) as well as other things that also support strengthening the *financial performance assessment* . For companies that *go public*, financial performance is an assessment that is used as a benchmark for investors in determining share buying and selling transactions (Kartika et al., 2020).

According to Warsidi and Bambang in Fahmi (2011)there are various analytical techniques for measuring financial performance, including ratio analysis,

which is the most widely used analytical technique, both by investors, creditors and other parties, in assessing company performance. For investors, there are three dominant financial ratios used, namely the liquidity ratio, solvency ratio and profitability ratio.

In this research, profitability ratios are the main focus of measuring a company's financial performance, where profitability is a measure of a company's success in generating profits. There are various types of profitability ratios that can be used, one of which is *Return on Equity (ROE). Return on Equity* is a ratio that measures a company's ability to generate profits based on certain share capital. The use of the ROE ratio is related to the company's ability to generate profits based on the use of certain share capital. According to Hanafi and Halim (2007)in Kalia (2013), a high figure for ROE indicates a high level of profitability.

Fahmi (2014) stated that debt is an obligation. So liabilities or debt are obligations owned by the company which come from external funds, whether from banking loans, leasing, bond sales and the like. The use of different levels of debt and equity in a company's capital structure is one of the company-specific strategies used by managers to improve performance (Gleason et al., 2000). The dominance of debt in the capital structure can create a risk of bankruptcy for the company because of the large total cost of debt that the company must bear. For this reason, companies must have a debt policy to avoid the risk of bankruptcy (Rozak et al., 2023).

2012-2014 was the year when many companies were *delisted* by the Indonesian Stock Exchange (BEI). In 2012-2024, the IDX delisted *12* companies, namely 4 companies in 2012, 7 companies in 2013 and 1 company in 2014 (stockok.com). The reason the company was *delisted* from trading on the IDX was mostly due to debt problems, so based on this data, optimizing the debt ratio is important in stable financial performance.

Table 1 below is a table of the causes of companies *being delisted* in 2018-2020 which was processed by the author and obtained from various sources .

Table 1. Reasons why companies *were delisted* 2012-2014

Year	Company	Sector	Causes of Delisting
2012	PT. Multibreeder	Manufacture	Privatization
	PT. Main Katarina	Service	Performance does not meet standards
	PT. Surya Inti Permata	Service	Failure to pay bond interest
	PT. Surya Intrindo Makmur	Manufacture	Shares are not actively traded
2013	PT. Indo Setu Bara Resources	Natural resources	Shares are not actively traded
	PT. Indosiar Karya	Service	Privatization
	PT. Amstelco Indonesia	Service	There is no indication of
	PT. Dayaindo Resources	Service	Declared bankrupt by the court
	PT. Panasia Filament	Manufacture	Privatization
	PT. Panca Wirasakti	Service	The company went bankrupt
	PT. Surabaya Agung Pulp & Paper Industry	Manufacture	The company went bankrupt
2014	PT. Asia Natural Resources	Service	There is no company *going*

Based on this table, in 2012-2014 there were twelve companies *delisted* from the IDX, four companies in 2012, seven companies in 2013, and one company in 2014. Most of the companies *delisted* from the IDX were due to debt problems. Of the 12 companies, 7 of them *were delisted* due to the company's financial problems related to debt. As for Related research regarding the influence of debt policy on financial performance includes Ifta Aprillia, Burhanuddin, Supawi (2021) who stated that STD has no effect on ROE. However, this research is inversely proportional to research conducted by Jati and Sudaryanto (2016)which states that STD has a positive and significant effect on ROE. Aprillia et al. (2021)states that long-term debt (LDT) does not have a significant effect on ROE. However, this research is different from research conducted by Nadeem et al. (2015)which shows the results of their

research that LTD has a positive effect on ROE.

LITERATURE REVIEW

Financial performance

According to the Indonesian Accountants Association (IAI) (2007), financial performance is a company's ability to manage and control the resources it owns. Meanwhile, according to Sucipto (2013)financial performance is the determination of certain measures that can measure the success of an organization or company in generating profits. According to Fahmi (2011), financial performance is an analysis carried out to see the extent to which a company has run the company using financial implementation rules properly and correctly(Rahmadhani & Indriyani, 2019).

Financial Performance Assessment

Return On Equity

According to Kasmir (2014), ROE is used to measure net profit after tax using own capital. This ratio also shows how efficiently the company uses its own capital to generate profits. The better or higher this ratio, the stronger the company's financial position, and vice versa. This R ratio is a ratio to measure net profit from all taxes with own capital. The higher this ratio the better. This means that the position of the company owner is getting stronger, and vice versa. The formula for finding Return on Equity (ROE) can be used as following:

$$ROE = \frac{Earning\ After\ Interest\ and\ Tax}{Equity} \times 100\%$$

Debt

According to Fahmi (2014) debt is an obligation (liabilities). So liabilities or debt are obligations owned by the company which come from external funds, whether from banking loans, leasing, bond sales and the like. According to Munawir (2014), debt is all the company's financial obligations to other rights that have not been fulfilled, where this debt is the company's source and/or capital originating from creditors. Debt itself is divided into two classifications, namely short-term debt (STD) and long-term debt (LTD). Short-term debt is also called current debt, while long-term debt can be called non-current debt.

Short term debt (STD)

Fahmi (2014)states that short-term debt is also called current debt. It is called current debt because short-term debt sources are used to fund needs that support company activities that are immediate and cannot be postponed and this short-term debt generally has to be repaid in less than one year(Ristianawati et al., 2021). Higher short-term debt will increase working capital to increase company productivity. The higher the level of short-term debt, the higher the ROE.

Long term debt (LTD)

Kasmir (2014) said that long-term debt is a company's obligations to other rights that have a term of more than one year. The use of long-term debt will affect ROE. If a company has large debts, the profits generated will be used to pay off the debt, which will affect the company's ROE(Sugiharti, 2023).

Total Debt (TD)

Long-term debt interest costs are expensive, plus short-term debt costs, the overall debt costs can reduce company profits. Kalia (2013) believes that increasing debt will directly increase interest expenses, so the company must cover it from the operating profits obtained. The higher the total debt, the higher the debt costs borne by the company (Kartika et al., 2023). The higher total debt will cause the company's profits to decrease. Thus, a higher *Total Debt will reduce financial performance.* Based on Ahmad et al. (2012) the proportion of *Total Debt* is calculated by dividing long-term debt by the company's total capital

Hypothesis

The hypotheses formulated in this research are as follows:

H $_{a1}$: *Short Term Debt* (STD) has a positive effect on *Return On Equity* (ROE)

H $_{a2}$: *Long Term Debt* (LTD) has a negative effect on *Return On Equity* (ROE)

Ha3: *Total Debt* (TD) has a negative effect on *Return On Equity* (ROE)

RESEARCH METHODS

Research design

According to the level of explanation, this research is categorized as associative research, namely research that aims to determine the relationship between two or more variables (Sugiyono, 2009). Based on the type of research data, this research is a type of quantitative data, namely data that can be input into a statistical measurement scale (Sugiharti, 2023).

The population used in this research is the financial reports of manufacturing companies listed on the IDX for the 2018-2020 period, numbering 142 in 2018, 140 in 2019 and 2020. he sampling technique uses *purposive sampling*, namely taking samples using predetermined criteria. The samples obtained in this research were 219.

Data was obtained through documentation, because this research uses data sources from company financial reports. The data analysis used was multiple linear regression analysis assisted by SPSS version 19 calculations.

Place and time of research

This research will be conducted on manufacturing companies listed on the BEI for the 2018-2020 period based on data obtained from the official BEI website, www.idx.co.id , and the Indonesian Stock Exchange office, Yogyakarta representative office on Jl. Mangkubumi 111 Yogyakarta.

Operational Definition of Variables

The variables that will be analyzed in this research are as follows:

a. Dependent Variable (Y)

Return on Equity (ROE) is a proxy for financial performance because it can show a company's ability to generate profits based on certain shares. According to Hanafi (2012), the operational definition of the variable Dependent Variable (Y). The dependent variable in this research is Return on Equity (ROE). Calculated using the formula:

$$ROE = \frac{\text{Laba bersih setelah pajak}}{Ekuitas} \times 100\%$$

b. Independent variables (X) The independent variables in this research are:

Short term debt with the formula:

$$STD = \frac{\text{Hutang jangka pendek}}{Ekuitas} \times 100\%$$

Long term debt (ltd)

$$LTD = \frac{\text{Hutang Jangka Panjang}}{Ekuitas} \times 100\%$$

Total Debt (TD) term debt with the formula:

Based on Ahmad et al. (2012)the proportion of *Total Debt* is calculated by dividing and is formulated as follows:

$$TD = \frac{\text{Total Debt (Rp)}}{Total\ Capital\ (Rp)} \times 100\%$$

RESULTS AND DISCUSSION

Descriptive statistics

Descriptive statistics is a process of collecting, presenting and summarizing which functions to provide an overview of data adequately researched . Data processing obtained descriptive statistical results as follows:

Table 3. Descriptive Statistics

Variable	n	Minimum	Maximum	Mean	Std. Deviation
STDs	219	0.04	0.74	0.2903	0.14441
LTD	219	0.01	0.58	0.1218	0.11943
TD	219	0.07	0.84	0.4121	0.18032
ROE	219	0.00	0.76	0.1600	0.12231
SIZE	219	25.28	32.08	28.2912	1.61116
S.G	219	-0.27	0.90	0.1392	0.15612

***Return On Equity* (ROE)**

In table 3 above, it can be seen that the minimum *Return On Equity value* is 0.00 and the maximum value is 0.76. This shows that the ROE value in this research sample ranges from 0.00 to 0.76 with an average *(mean)* of 0.1600 with a standard deviation of 0.12231. The average value *(mean)* is greater than the standard deviation, namely 0.1600 > 0.12231, which means that the distribution of *Return On Equity values* is good. The data is homogeneous, there is not too big a gap between the lowest and highest values of the *Return On Equity variable* during the research period.

***Short Term Debt* (STD)**

In table 3 above, it can be seen that the minimum value of *Short Term Debt* is 0.04 and the maximum value is 0.74. This shows that the STD value ranges from 0.04 to 0.74 with an average *(mean)* of 0.2903 with a standard deviation of 0.14441. The average value *(mean)* is greater than the standard deviation, namely 0.2903 > 0.14441, which means that the distribution of *Short Term Debt values* is good. The data is homogeneous, there is not too big a gap between the lowest and highest values of the *Short Term Debt variable* during the research period.

***Long Term Debt* (LTD)**

In table 3 above, it can be seen that the minimum value of *Long Term Debt* is 0.01 and the maximum value is 0.58. This shows that the LTD value in this research sample ranges from 0.01 to 0.58 with an average *(mean)* of 0.1218 with a standard deviation of 0.11943. The average value *(mean)* is greater than the standard deviation, namely 0.1218 > 0.11943, which means that the distribution of *Long Term Debt values* is good. The data is homogeneous, there is not too big a gap between the lowest and highest values of the *Long Term Debt variable* during the research period.

Total Debt (TD)

Based on the results of descriptive statistical tests in table 3 above, it can be seen that the minimum value *of Total Debt* is 0.07 and the maximum value is 0.84. This shows that the BP value in this research sample ranges from 0.07 to 0.84 with an average *(mean)* of 0.4121 with a standard deviation of 0.18032. The average value *(mean)* is greater than the standard deviation, namely 0.4121 > 0.18032, which means that the distribution of *Total Debt values* is good. The data is homogeneous, there is not too big a gap between the lowest and highest values of the *Total Debt variable* during the research period.

Analysis Test Results

The analysis prerequisite test in this research uses the classic assumption test as a requirement before carrying out regression analysis. The classic assumption tests carried out were the normality test using the *Kolmogorov-Smirnov test* (KS Test), the autocorrelation test using *Durbin Watson* statistics, the multicollinearity test using *the Variance Inflation Factor* (VIF), and the heteroscedasticity test using the *Glejser test.*

Normality test

The normality test aims to test whether in the regression model, the independent variable and the dependent variable both have a normal distribution or not Ghozali (2016). This test is carried out by seeing whether the residual variables of the research data have a normal distribution or not. The normality test results were carried out by looking at the *2-tailed significant*

value of the residual variable. Data can be said to be normally distributed if the *Asymp value. Sig (2-tailed)* > 0.05, conversely if the value of *Asymp. Sig (2-tailed)* < 0.05, then the data is not normally distributed (Ghazali, 2011).

The following is a table of normality test results using the KS test on two regression models.

Table 4. Model 1 Normality Test Results

	Unstandardized Residual M1	Conclusion
Kolmogorov-Smirnov Z		
Asymp. Sig. (2-tailed)	0.890 0.407	Normally distributed

Based on table 4, the normality test in regression model 1 shows the *Asymp value. Sig (2-tailed)* is 0.407. This shows that the data is normally distributed because *the Asymp value. Sig (2-tailed)* > 0.05. Thus, H $_0$ is rejected and Ha $_a$ is accepted.

Table 5. Model 2 Normality Test Results

	Unstandardized Residual M2	Conclusion
Kolmogorov-Smirnov Z		
Asymp. Sig. (2-tailed)	0.938 0.343	Normally distributed

Based on table 5, the normality test in regression model 2 shows the *Asymp value. Sig (2-tailed)* is 0.343. This shows that the data is normally distributed because *the Asymp value. Sig (2-tailed)* > 0.05. Thus, H $_0$ is rejected and Ha $_a$ is accepted.

Multicollinearity Test

Table 6. Multicollinearity Test Results for Model 1

Variable	*Collinearity*		Conclusion
	Toleran	*VIF*	
STDs	0.957	1,045	Multicollinearity does not
LTD	0.806	1,241	Multicollinearity does not
SIZE	0.814	1,228	Multicollinearity does not
S.G	0.958	1,043	Multicollinearity does not

The multicollinearity test aims to determine whether there is a relationship between the independent variables or independent variables. A good regression model is a model in which there is no correlation between the independent variables. The multicollinearity test can be done by looking at the *tolerance* and VIF values. The regression model is said to have multicollinearity if the *tolerance value* is < 0.1 and *VIF* > 10, and vice versa is free from multicollinearity if the *tolerance value is* > 0.1 and *VIF* < 10. Following are the results of the multicollinearity test from the two regression models.

Based on table 6 above, all variables show a *tolerance value* > 0.10, and a VIF value < 10, so it can be concluded that regression model 1 in this study is free from multicollinearity problems. Therefore, regression model 1 is suitable for use in research.

Table 7. Multicollinearity Test Results for Model 2

SIZE	0.921	1.086	There is no multicollinearity
]SG	0.962	1.039	There is no multicollinearity
TD	0.889	1.125	There is no multicollinearity

Based on table 7 above, all variables show a *tolerance value* > 0.10, and a VIF value < 10, so it can be concluded that regression model 2 in this study is free from multicollinearity problems. Therefore, regression model 2 is suitable for use in research.

Heteroscedasticity Test

The heteroscedasticity test aims to test whether in the regression model there is an inequality *of variance* from *the residuals* of one observation to another. Heteroscedasticity testing can be done using *the Glejser test* , namely by regressing the independent variable on *the absolute residual.* Residual is the difference between the observed value and the predicted value, while *absolute* is the absolute value. This test is carried out by regressing the residual value as the dependent variable with the independent variable. The level of confidence used is 5%. If the significance

value is greater than 0.05, then there are no symptoms of heteroscedasticity. The following is a table of heteroscedasticity test results.

Table 8. Heteroscedasticity Test Results for Model 1

Variable	Sig.	Conclusion		
STDs	0.093	Heteroscedasticity	does	not
LTD	0.137	Heteroscedasticity	does	not
SIZE	0.729	Heteroscedasticity	does	not
S.G	0.694	Heteroscedasticity	does	not

Glejser test , regression model 1, which is in table 8, shows that all independent variables have significance values above the 5% confidence level, so that regression model 1 is said to not have heteroscedasticity.

Table 9. Heteroscedasticity Test Results for Model 2

Variable	Sig.	Conclusion		
TD	0.754	Heteroscedasticity	does	not
SIZE	0.933	Heteroscedasticity	does	not
S.G	0.638	Heteroscedasticity	does	not

Glejser test , regression model 2, which is in table 9, shows that all independent variables have significance values above the 5% confidence level, so that regression model 2 is said to not have heteroscedasticity.

Autocorrelation Test

A regression model is said to be good if it is free from autocorrelation. The autocorrelation test can use the *Durbin Watson test* (DW *test)* by looking at *the Durbin Watson* (DW) value. The results of the autocorrelation test from the two regression models can be seen as follows: The autocorrelation test can use the *Durbin Watson test* (DW *test)* by looking at the *Durbin Watson* (DW) value.

The results of the autocorrelation test from the two regression models can be seen as follows:

Table 10. Model 1 Autocorrelation Test Results

Model	Durbin-Watson	Conclusion		
1	1,940	There	is	no

Table 10 shows that the *Durbin Watson value* in regression model 1 is 1.940. Based on the DW value obtained, it will then be compared with the du value and 4-du value. The du value is obtained from the existing *Durbin Watson table by adjusting the number of samples, the number of independent variables, and the selected significance level.* Regression model 1 research uses a total sample of 219, 4 independent variables and a significance level of 0.05, so a du value of 1.810 is obtained. Autocorrelation test-free decision making is based on the provisions du < d < 4-du or 1.810 < 1.940 < 4-1.810. The results are 1.810 < 1.940 < 2.190, so it can be concluded that regression model 1 is free from autocorrelation and is suitable for use.

Table 11. Model 2 Autocorrelation Test Results

Model	Durbin-Watson	Conclusion		
1	2,020	There	is	no

Table 11 shows that the *Durbin Watson value* in regression model 2 is 2.020. Regression model 2 research uses a total sample of 219, 3 independent variables and a significance level of 0.05, so a du value of 1.799 is obtained. Autocorrelation test-free decision making is based on the provisions du < d < 4-du or 1.799 < 2.020 < 4-1.799. The results are 1.799 < 2.020 < 2.201, so it can be concluded that regression model 2 is free from autocorrelation and is suitable for use .

Analysis Results

Multiple linear regression

Table 12. Results of Multiple Linear Regression Analysis Model 1

Model	*Unstandardized Coefficients*		*Std Coefficients*	Q	Sig.
	B	*Std. Error*	*Beta*		
(Constant	-0.203	0.150		-1,349	0.179
STDs	-0.009	0.056	-0.011	-0.160	0.873
LTD	-0.308	0.073	-0.300	-4,190	0,000
SIZE	0.013	0.005	0.177	2,480	0.014
S.G	0.163	0.052	0.208	3,167	0.002

Based on the results of the analysis in table 12, a multiple linear regression equation can be formulated for regression model 1, namely:

ROE = -0.203 - 0.009 STD - 0.308 LTD + 0.013 SIZE + 0.163 SG + e

Model	*Unstandardized*		*Standardized*	Q	Sig.
	B	*Std. Error*	*Beta*		
(Consta	-0.020	0.144		-	0.8
TD	-0.114	0.047	-0.168	-	0.0
SIZE	0.007	0.005	0.094	1,3	0.1
S.G	0.174	0.053	0.222	3,3	0.0

Based on the results of the analysis in table 13, a multiple linear regression equation can be formulated for regression model 2, namely:

ROE = -0.020 - 0.114 TD + 0.007 SIZE + 0.174 SG + e

Hypothesis Testing Results

Hypothesis testing carried out partially aims to find out whether each independent variable significantly influences the dependent variable. The way to carry out a t test is to compare the calculated t with the t table at a confidence level of 95% or a of 5% (0.05). The decision for a partial test is made with the following conditions:

a. If the significance level (a) is <5%, then H0 is rejected and conversely Ha is accepted.
b. If the significance level (a) is > 5%, then H_0 is accepted and conversely H_a is rejected.

Model	*Unstandardized Coefficients*		*Standardized Coefficients*	Q	Sig.
	B	*Std. Error*	*Beta*		
(Constant)	-0.203	0.150		-1,349	0.179
STDs	-0.009	0.056	-0.011	-0.160	0.873
LTD	-0.308	0.073	-0.300	-4,190	0,000
SIZE	0.013	0.005	0.177	2,480	0.014
S.G	0.163	0.052	0.208	3,167	0.002

Table 15. Partial Test Results (t Test) Model 2

Model	*Unstandardized Coefficients*		*Standardized Coefficients*	Q	Sig.
	B	*Std. Error*	*Beta*		
(Constant)	-0.020	0.144		-0.140	0.889
TD	-0.114	0.047	-0.168	-2,407	0.017
SIZE	0.007	0.005	0.094	1,375	0.170
S.G	0.174	0.053	0.222	3.3100	0.001

Based on these two tables, the influence of *Short Term Debt, Long Term Debt* and *Total Debt* on *Return on Equity* can be explained as follows:

Short Term Debt (STD)

H_{01} : $p_1 < 0$, meaning there is no positive influence of *Short Term Debt* on *Return On Equity* .

Ha1: p1 > 0, meaning that there is a positive influence of *Short Term Debt* on *Return On Equity* .

Based on table 14 of the results of the t test model 1, it can be seen that the regression coefficient value for the *Short Term Debt variable* is -0.009 with a calculated t value of -0.160. The significance level is greater than the specified significance level, namely 0.873 > 0.05. Thus, the *Short Term Debt variable* has no effect on *Return On Equity* in manufacturing companies listed on the Indonesia Stock Exchange for the 2012-2014 period, so the first hypothesis is rejected.

Long Term Debt (LTD)

H_{02} : $p_2 > 0$, meaning there is no negative influence of *Long Term Debt* on *Return On Equity* .

Ha2: P2 < 0, meaning there is a negative influence of *Long Term Debt* on *Return On*

Equity .

Based on table 14 of the results of the t test model 1, it can be seen that the regression coefficient value for the *Long Term Debt variable* is -0.308 with a calculated t value of -4.190. The significance level is smaller than the specified significance level, namely 0.000 < 0.05. Thus, the *Long Term Debt variable* has a negative and significant effect on *Return On Equity* in manufacturing companies listed on the Indonesia Stock Exchange for the 2012-2014 period , so the second hypothesis is accepted.

Total Debt (TD)

H_{03} : $p_3 > 0$, meaning there is no negative influence *of Total Debt* on *Return On Equity* .

Ha_3 : $p_3 < 0$, meaning that there is a negative influence *of Total Debt* on *Return On Equity* .

Based on table 15 of the results of the t test model 2, it can be seen that the regression coefficient value for the *Total Debt variable* is -0.114 with a calculated t value of -2.407. The significance level is smaller than the specified significance level, namely 0.017 < 0.05. Thus, the *Total Debt variable* has a negative and significant effect on *Return On Equity* in manufacturing companies listed on the Indonesia Stock Exchange for the 2012-2014 period, so the third hypothesis is accepted.

Test the Goodness of Fit Model

Simultaneous Significance Test (F Statistical Test)

Variable testing is not only carried out partially, but also tested simultaneously or carried out an F test. The calculated F test is intended to test the regression model on the influence of all independent variables simultaneously on the dependent variable. The results of the F test in this research can be seen in tables 16 and 17 below.

Table 16. Simultaneous Test Results (F Test) Model 1

Model	*F*	*The g.*	Conclusion
Regression	6,	0.000 [a]	Significant

Table 17. Simultaneous Test Results (F Test) Model 2

Model		*The g.*	Conclusion
Regression	5.	0.002 [a]	Significant

From table 16, namely the F test of regression model 1, the F value is 6.833 and the significance level is 0.000. Judging from the significance value, the significance value is smaller than 0.05, which means that the *Short Term Debt, Long Term Debt, Size* and *Sales Growth variables* simultaneously influence *Return On Equity* (ROE).

From table 17, namely the F test of regression model 2, the F value is 5.022 and the significance level is 0.002. Judging from the significance value, the significance value is smaller than 0.05, which means that the *Total Debt, Size* and *Sales Growth variables* simultaneously influence *Return On Equity* (ROE). b. Coefficient of Determination *(AdjustedR*).

The coefficient of determination *(Adjusted R^2)* is used to measure the suitability of the multiple linear regression equation in research by providing the percentage of total variation in the dependent variable that is explained by all independent variables. The coefficient of determination *(Adjusted R*) essentially measures how far the model's ability is to explain variations in the dependent variable (Ghozali, 2016). The following is a table of *Adjusted R* results from the two regression models used.

Table 18. Results of the Determination Coefficient Model 1

Model	R	*R Square*	*Adjusted R Square*	*Std. Error of the Estimate*
1	0.337 [a]	0.113	0.097	0.11625

Adjusted R [2] test results in model 1 in the table above were obtained at 0.097. This shows that the variation in ROE that can be explained by *the short term debt* and *long term debt variables* is 9.7%, while the remaining 90.3% is explained by other variables not examined in this research.

Table 19. Results of the Determination Coefficient Model 2

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.256[a]	0.065	0.052	0.11906

Adjusted R test results in model 2 in the table above were obtained at 0.052. This shows that the variation in ROE that can be explained by the *total debt variable* is 5.2%, while the remaining 94.8% is explained by other variables not examined in this research.

CONCLUSIONS AND SUGGESTIONS

Based on the results of the multiple linear regression analysis carried out, it can be concluded as follows:

1. *Short term debt* has no effect on *return on equity*. This result is proven by a statistical test which gives a significance value of 0.873 which is greater than the required significance level, namely 0.05. The regression coefficient shows a negative direction of -0.009. Therefore, the first hypothesis in this study which states that *short term debt* has a positive effect on *return on equity* is rejected.
2. *Long term debt* has a negative and significant effect on *return on equity*. This result is proven by a statistical test which gives a significance value of 0.000, which is smaller than the required significance level, namely 0.05. The regression coefficient shows a negative direction of -0.308. Therefore, the second hypothesis in this research which states that *long term debt* has a negative effect on *return on equity* is accepted.
3. *Total debt* has a negative and significant effect on *return on equity.* This result is proven by a statistical test which gives a significance value of 0.017, which is smaller than the required significance level, namely 0.05. The regression coefficient shows a negative direction of -0.114. Therefore, the third hypothesis in this research which states that *total debt* has a negative effect on *return on equity* is accepted.
4. The regression coefficient in this study obtained a coefficient of determination *(Adjusted R*) ranging from 0.052 to 0.097. This shows that the variation in *Return On Equity* that can be explained by the *short term debt, long term debt* and *total debt variables* in this study is 5.2% to 9.7%, while the remaining 90.3% to 94.8% is explained by other factors outside this research model.

Based on the conclusions and limitations explained previously, several suggestions can be made as follows:

1. For potential investors who want to invest, they must consider the company's debt policy. because long-term debt and total debt have been proven to influence the financial performance of manufacturing companies listed on the Indonesia Stock Exchange in 2018-2020.
2. For future researchers who will research the same topic, it is recommended to add variables to the research model and use the latest data so that the research results are *up to date.*

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