

# Dimension of Debt to Earnings Management

Irine Mahardhika Putri<sup>1</sup>, Tumirin<sup>2</sup>, Nyimas Wardatul Afiqoh<sup>3</sup>

Universitas Muhammadiyah Gresik

*Irine.dhyca17@gmail.com, tumirin@umg.ac.id, afiqohnyimas@umg.ac.id*

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## Abstract

This study aims to determine the effect of Debt to Equity Ratio (DER), Debt to Asset Ratio (DAR), and Long Term Debt to Equity Ratio (LTDER) on earnings management. This study uses a quantitative research approach. Collecting techniques using documentary data or secondary data. The sample selection used purposive sampling method. From the predetermined criteria, a sample of 120 company data was obtained. The data analysis used multiple linear regression analysis. The results showed that the Debt to Equity Ratio had a significant positive effect on earnings management. Debt to Asset Ratio has a significant positive effect on earnings management. Long Term Debt to Equity Ratio has a negative effect on earnings management. Simultaneously variable Debt to Equity Ratio, Debt to Asset Ratio, and Long Term Debt to Equity Ratio has a negative effect on earning management. Simultaneous significant test using by comparing F count with F table.

Keywords: Debt Equity Ratio; Debt Asset Ratio; Long Term Debt Equity Ratio; and earnings management.

## 1. Introduction

Financial reports are a form of corporate management accountability reports to external parties in the form of statements of financial position, income statements, reports on changes in capital, cash flow reports and notes on financial statements (Saputra, 2013). The main thing that users of financial statements pay attention to is profit, because profit contains potentially very important information. The benefits of profit information are to assess potential changes in economic resources that may be controllable in the future, generate cash flows from existing resources, and for formulation of considerations about the company's effectiveness in utilizing additional resources (Yulia, 2013).

Earnings management adds to the bias of financial reports and can disturb users of financial statements who believe the engineered profit figures are unengineered profit figures, and for the layman's view earnings management is considered unethical, even a form of informal manipulation so that it is misleading. The issue of earnings management is actually not a new thing in the practice of financial reporting in a business entity. This is caused by the cruelty of the market to companies that are unable to meet targets or miss what the market predicts. This pressure to make profits often has an impact on revenue generation for management, so management carries out earnings management to influence profit figures which causes a decrease in the quality of the company's financial statements concerned (Puspitasari, 2013).

Accounting is an information system that identifies, records and communicates the economic events of an organization to interested users. Users of accounting information themselves can be grouped into two, namely internal users and external users. Internal users consist of management and owners, while external parties are investors, creditors, and also the government.

This accounting information is presented by the company in the form of financial reports. Presentation of financial statements by the company is a form of corporate responsibility to interested parties. This is because management performance is reflected in financial reports, so that financial reports are a form of management responsibility for managing financial reports owned by owners (Rita 2011). According to the Statement of Financial Accounting Standards (PSAK, 2009) No. 1, the purpose of financial reports is to provide information on the financial position, financial performance and cash flows of entities that are useful to most users of financial statements in making economic decisions. This can show the results of management accountability for the use of resources.

In order to achieve these objectives, financial reports present information about entities which include; Assets, Liabilities, Equity, Income and Expenses, including gains and losses, contributions from and distributions to owners in their capacity as owners, cash flows. This information must be understandable by those who have business and economic insights so that the information presented in the financial statements is quickly understood by all interested parties and can be used for decision making. Complete and open so as not to mislead those who read it. (Christian, 2011).

Management as an agent in the company is more oriented to the bonuses that will be given by the principle, when management as an agent can meet the profit level desired by the principle. While shareholders as a principle are more oriented to a representative profit level, with this information asymmetry it provides an opportunity for management to take opportunistic actions in the form of earnings management. Opportunistic actions themselves are self-serving actions carried out by management. So that it usually has an impact on manipulative actions carried out by management. Agency theory (agency theory) explains that information asymmetry occurs between management and shareholders due to a conflict of interest between management and shareholders (Bagas, 2014).

Earnings management is an action taken by management to meet the desired profit level. Based on data from the Ministry of SOEs, the Minister of SOEs said that SOE dividend payments targeted for the 2014 fiscal year of IDR 40 trillion were not achieved, because a number of SOEs suffered large losses. The large number of large SOEs that experienced foreign exchange losses resulted in the payment of dividends in 2014 only amounting to IDR 36.2 trillion and there was an underpayment of IDR 3.8 trillion. The airline PT Garuda Indonesia, Tbk is one of the state-owned enterprises in question. In 2014, PT Garuda Indonesia Tbk became a BUMN that suffered the most losses compared to other BUMNs. Due to these losses, the airline company cannot pay dividends to the state (Lasmana, A., & Wijayanti, 2018).

This proves that in fact the problem of this manipulation does not only involve international scale private companies but has also penetrated into companies which are basically managed by companies. So, from the examples above, we can conclude that currently the problem of financial statement manipulation in the form of earnings management does not only occur in large-scale private companies but has also ensnared government companies, such as BUMN (Anggraeni & Hadiprajitno, 2013).

Until now, the problem of earnings management is still a pro and cons in society. These pros and cons occur between practitioners and academics. Practitioners consider that earnings management is an act of fraud. Meanwhile, from the academic side, they consider that earnings management cannot be categorized as an act of fraud. Basically practitioners say that earnings management is an act of fraud because according to them earnings management is an opportunistic act of a manager to play with the numbers in the financial statements in order to achieve the goals they want.

This opportunistic action by management can of course be categorized as an act of fraud because earnings management is an act of obscuring the company's condition which is carried out consciously by management. So that stakeholders as users of financial statements cannot know the actual condition of the company. Meanwhile, from the academic side, they consider earnings management to be an impact of the freedom to use and choose accounting methods carried out by managers in recording and compiling financial reports. Although it cannot be ignored that earnings management is one of the causes of the destruction of the economic, ethical and moral order (Handayani, RS, & Rachadi, 2009).

The complexity of the business environment which is always moving dynamically, accounting provides an opportunity for management to choose one of several available alternatives. Oftentimes the leeway provided by the flexibility to choose an accounting method to anticipate the dynamics of developments in the business environment is misused by management to perform earnings engineering or perform earnings management. Earnings management is a process of taking certain deliberate steps within the limits of generally accepted accounting principles to produce the desired level of reported profit (Ustman, 2017).

The company's leverage ratio or debt ratio also has a major influence in determining the company's financial performance. The leverage ratio measures how much debt is used in company spending. Leverage or debt of a company can have a good or bad effect on the company. The use of debt to finance a company will be profitable if the company's profitability or profit is good, conversely, debt will also have a negative impact if the profit earned by the company cannot be used to cover the company's obligations, both short and long term. On the other hand, debt also increases the possibility of company bankruptcy and this will have a negative impact on investors' perceptions of the company's financial performance (Sudana, 2011). Debt to equity ratio is a comparison between debts to equity. This ratio shows the risk of the company, if the lower the Debt to equity ratio reflects the greater the company's ability to guarantee its debts with its equity. The size of the ratio will show the proportion of company capital obtained from debt compared to other sources of capital. The higher the proportion causes the company's profit to be more erratic and increases the possibility that the company cannot fulfill its debt payment obligations (Nurfadillah, 2016).

Debt to asset ratio explains how much the company's wealth is financed by debt. Too many company assets come from debt will create risk for the company because if the company uses more and more debt to finance its assets, it will affect the company's greater liabilities in the form of fixed and interest obligations. On the other hand, debt is also able to build opportunities to improve company performance. Meanwhile, the Long term debt to equity ratio is a measure of the size of the use of long term debt compared to the company's own capital. Long term debt to equity ratio in another sense is a ratio

that measures the size of a company's capital financed through long-term debt. The greater the value of this ratio reflects the greater the company's financial risk, and it could be the other way around (Khoir, 2013).

Earnings management is earnings management that arises from information asymmetry that allows management to modify earnings, so that earnings information in the financial statements will show a value that gives investors satisfaction over the performance of management in a company. Management can modify earnings by selecting accounting policies of a certain standard with the aim of maximizing management's welfare and the value of a company. Earnings management can occur in a company due to weak inherent factors in accounting policies but still within the corridors of GAAP (Generally Accepted Accounting Principles) (Sosiawan, 2012).

Earnings management recently is a common phenomenon that occurs in a company. Practices carried out to influence profit figures can occur legally or illegally. Legal practice in earnings management means that efforts to influence profit figures do not conflict with financial reporting rules in the Generally Accepted Accounting Principles (PABU) or SAK, namely by taking advantage of opportunities to make accounting estimates, make changes to accounting methods, and shift income or expense periods. As for earnings management that is carried out illegally, it is carried out in ways that are not permitted by (PABU), namely by reporting fictitious income or expense transactions by adding or subtracting transaction values, or perhaps by not reporting a number of transactions, so that will generate profits at a desired profit or level.

Based on the explanation above, the researchers conducted research on manufacturing companies on the Indonesia Stock Exchange which were influenced by several factors, namely debt and earnings management. The results of this research will be poured in the form of a thesis with the title "Dimensions of Debt on Earnings Management".

#### **a. Problem Formulation**

Based on the problems above, the problems are formulated as follows:

- 1) Does *Debt to equity ratio* have an influence on earnings management?
- 2) Does *Debt to asset ratio* have an influence on earnings management?
- 3) Does *Long term debt to equity ratio* have an effect on earnings management?

#### **b. Purpose**

Based on the formulation of the problem above, the purpose of the researcher in conducting this research is to analyze and find out the following:

- 1) To determine the effect of *Debt to equity ratio* on earnings management.
- 2) To determine the effect of *Debt to asset ratio* on earnings management.
- 3) To determine the effect of *Long Term Debt to equity ratio* on earnings management.

#### **c. Benefits**

Based on the formulation of the problem and research objectives above, the benefits of conducting this research are to find out and analyze the following:

- 1) For other researchers  
To increase knowledge and provide useful input for other researchers who have an interest in learning about earnings management practices.
- 2) For investors  
Providing information to investors in making decisions regarding investments or investing, especially in assessing the quality of earnings reported in the financial statements.
- 3) For companies  
To provide information to the company regarding the impact of debt on earnings management.

#### **d. research contribution**

in his research explains empirical evidence regarding patterns of earnings management practices carried out by companies that violate debt agreements and provides empirical evidence regarding the tendency of companies that violate debt agreements to carry out greater earnings management than companies that do not violate debt agreements. Testing the first hypothesis provides empirical evidence that companies that violate debt agreements carry out earnings management practices that increase reported earnings in the periods before the agreement occurs. These results support the conventional view that debt agreements motivate managers to manage earnings. Testing the second hypothesis shows that the

management of companies that violate debt agreements do more earnings management than the management of control companies in the period before and when the debt violations occur. So this research provides empirical evidence regarding the tendency of companies that violate debt agreements to manage more earnings than companies that violate debt agreements.

Anita and Arni (2017) in their research explained that there is an effect *expected premanaged earnings* and dividends on earnings management practices. These results are in accordance with the study of Daniel et al. (2008) which states that *premanaged earnings* which is the net income from earnings management behavior will have the opposite effect on discretionary accruals, while the expected dividends, which are *dividends thresholds*, have a direct effect on discretionary accruals. The test results show that *payers* and *non-payers* have the same tendency to practice earnings management. Thus, it is not proven that companies that paid dividends in the previous year (*payers*) are more likely to carry out earnings management to be able to meet the expected dividends compared to *non-payers* companies (companies that did not pay dividends in the previous year). This study states that the expected dividend is indeed one of the important determinants of *earnings thresholds*. However, dividends are not a unique *motivation motivation* for companies to carry out earnings management.

Dwiharyadi (2017) in his research explained that he had not succeeded in providing empirical evidence that both the audit committee and the board of commissioners who have accounting expertise have a negative effect on the level of company earnings management. However, an interesting finding is that when audit committees with accounting expertise interact with audit committees with financial expertise, the results actually show a positive effect on earnings management. Although these results are not in accordance with the hypothesis, at least it has succeeded in providing empirical evidence that the existence of accounting expertise and financial expertise in the audit committee team has an influence on the company's earnings management even though it has a positive effect. However, this study also succeeded in providing empirical evidence that the financial expertise of both the audit committee and the board of commissioners has no effect on earnings management. These results reinforce the notion that financial expertise alone is not able to reduce corporate earnings management. Thus, it is necessary to collaborate between accounting expertise and financial expertise to reduce corporate earnings management actions.

## **2. Literature review**

### **a. Debt**

Contracts Debt contracts are one of the motivations of managers to carry out earnings management. Managers of companies that violate debt agreements tend to choose accounting methods that have an impact on increasing profits (Putra, 2012).

Financial leverage (debt divided by total assets) is a measure of the contract between the manager and the capital provider which can be explained by the debt covenant hypothesis in positive accounting theory. Financial leverage describes the relationship between total assets and ordinary share capital or shows the use of debt to increase profits. Meanwhile, the leverage ratio shows how much assets are funded with debt so that it shows the risk for the lender. Leverage is important to analyze because it relates to company performance (Adrianto, R., & Anis, 2014).

### **b. Debt to Equity Ratio**

*Debt to Equity Ratio* (DER) is a ratio that compares the amount of debt to equity. This ratio is often used by analysts and investors to see how much a company's debt is compared to the equity owned by the company or its shareholders. The higher the DER number, it is assumed that the company has a higher risk of its liquidity.

### **c. Debt to Asset Ratio**

*Debt to Asset Ratio* (DAR) explains how much a company's assets are financed by debt. Too many company assets come from debt which creates risk for the company if the company uses a lot of debt to finance its assets will affect the company's greater liabilities in the form of fixed and interest obligations, on the other hand debt is also able to build opportunities to improve company performance. The debt ratio can be measured through the following mathematical formula (Sundjaja and Barlian, 2003:140):

### **d. Long Term Debt to Equity Ratio**

This ratio measures the size of the use of long-term debt compared to the company's own capital. *Long term debt to equity ratio* in another sense is a ratio that measures the size of a company's capital financed through long-term debt. The greater the value of this ratio reflects the company's financial risk that is getting bigger, and it could be the other way around (Sudana, 2011).

### **e. Factors Driving**

*Positive Earnings Management accounting theory* states that there are three things behind the occurrence of earnings management, namely as follows (Sulistyanto, 2008):

1) *Bonus Plan Hypothesis*

*The Bonus Plan Hypothesis* states that managers of firms with bonus plans are more likely to use accounting methods that increase current period report earnings. In managerial bonuses or compensation, the company owner promises that the manager will receive a number of bonuses if the company's performance reaches a certain amount. This bonus promise is the reason for managers to manage and regulate their profits at a certain level according to what is required in order to receive bonuses.

2) *Debt (equity) hypothesis*

*Debt (equity) hypothesis* states that the greater the ratio of debt to equity of a company, the more likely managers are to use accounting methods that increase earnings. In the context of a debt agreement, the manager will manage and regulate profits so that debt obligations that should be settled in a certain year can be postponed for the following year. This is a manager's effort to manage and regulate the amount of profit which is an indicator of the company's ability to settle its debt obligations. The manager will manage and regulate the amount of profit to delay the burden in the period in question and will be completed in future periods.

3) *Political cost hypothesis*

*Political cost hypothesis* states that the greater the profit earned by the company, the greater the tax on the company and the smaller the company's profit, the smaller the tax that will be withdrawn. This condition encourages managers to manage and regulate their profits in a certain amount so that the tax that must be paid is not too high, because the manager as a manager certainly does not want the obligations that must be completed to burden him too much. This is very easy for companies to do, namely by deducting future period costs into current period costs, and conversely recognizing current period income as future periods. Another effort made by companies to save on taxes is to play with profits when there is a change in legislation that imposes lower tax rates in the future. The company postponed the recognition of the current period's profit and will only recognize it when the new regulations are implemented effectively.

3. *Hypothesis Formulation*

a. *Relationship Debt to Equity Ratio to Profit Management*

DER is a comparison between debt to equity. This ratio shows the company's risk, where the lower the DER, the company can be protected if there is a decline in the business of the company concerned. So a company that has a high DER may not be able to attract additional capital by borrowing from other parties. The higher the proportion of DER, the more erratic the company's profit and the possibility of the company not being able to meet its debt payment obligations. Therefore, the higher the proportion of the debt ratio, the higher the financial risk of a company. The level of the company's financial risk can indirectly affect the company's stock price. This is in line with Nurfadillah's research (2011) which gives significant results on earnings management.

This proves that the higher the *Debt to equity ratio*, the lower the earnings management actions taken by the company. So from the results of the explanation above, the following hypothesis can be obtained:

H1: *Debt to equity ratio* has a significant effect on earnings management.

b. *The relationship between Debt to Asset Ratio and*

DAR Profit Management explains how much a company's wealth is financed by debt. Too many company assets come from debt will create risk for the company because if the company uses more and more debt to finance its assets, it will affect the company's greater liabilities in the form of fixed and interest obligations. On the other hand, debt is also able to build opportunities to improve company performance. This statement is in line with research by Zahroh, et al (2013) which gave results on a significant effect on earnings management. This proves that the higher the *Debt to assets ratio*, the lower the earnings management actions taken by the company. So from the results of the explanation above, the following hypothesis can be obtained:

H2: *Debt to assets ratio* has a significant effect on earnings management.

c. *Relationship of Long Term Debt to Equity Ratio to Profit Management*

According to Sudana (2011:21), this ratio measures the size of the use of long-term debt compared to the company's own capital. LDER in another sense is a ratio that measures the size of a company's capital financed through long-term debt. The greater the value of this ratio reflects the greater the company's financial risk, and the bias is vice versa. This statement is in line with research by Zahroh, et al (2013) which gave significant results on earnings management. This proves that the higher the *Long term debt to equity ratio*, the lower the earnings management actions taken by the company. Then the results of the explanation above can be obtained by the hypothesis.

H3: *Long term debt to equity ratio* has a significant effect on earnings management.

#### d. Conceptual

e. Framework The conceptual framework is a conceptual model of how the theory relates to various factors that have been identified as important issues and uses multiple linear regression analysis. The important issues in this study are the *Debt to assets ratio*, *Debt to equity ratio*, *Long term debt to equity ratio* which will affect earnings management. Based on the description of the formulation of the hypothesis above, the conceptual framework of Figure 2.1 can be displayed as follows:

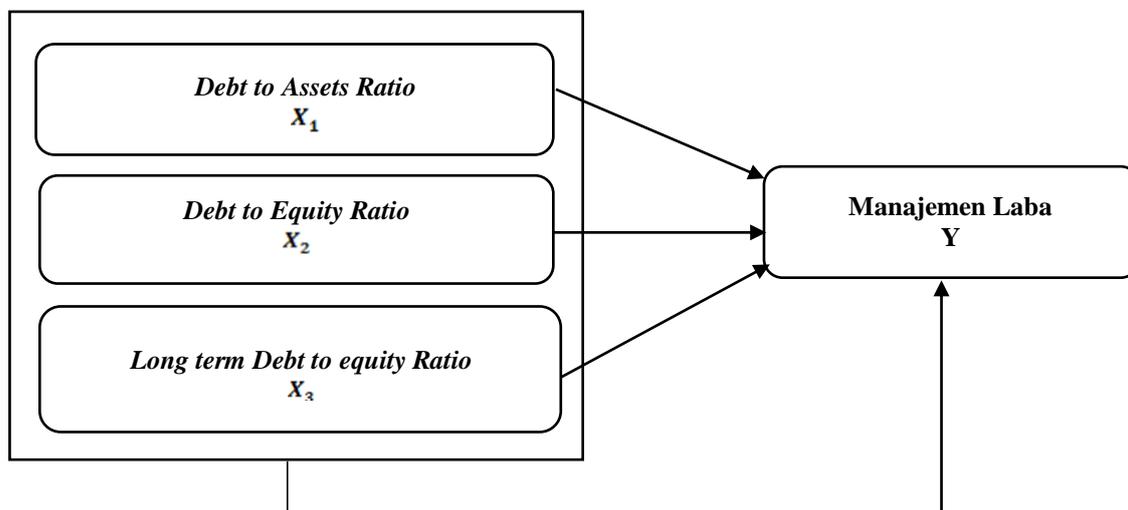


Figure 2.1

#### Conceptual Framework

Based on the figure above, this study aims to find the factors that influence earnings management. The dependent variable in this study is earnings management which is concluded with ( $Y$ ), the independent variable in this study is the *Debt to assets ratio*, *Debt to equity ratio*, *Long term debt to equity ratio*, which is concluded by ( $X_1$ ), ( $X_2$ ) and ( $X_3$ ). The data analysis technique used is multiple linear regression. Whereas the variables *Debt to assets ratio* ( $X_1$ ), *Debt to equity ratio* ( $X_2$ ), *Long term debt to equity ratio* ( $X_3$ ) simultaneously affect earnings management.

### 3. Research Method

#### 3.1 Type and Location of Research

This research is a quantitative research. Quantitative research is a paradigm that emphasizes testing theories by measuring variables with numbers and conducting data analysis with statistical procedures. Quantitative research with *purposive sampling technique* aims to test the hypothesis. The population used in this study are manufacturing companies listed on the Indonesia Stock Exchange (IDX). The research period used is from 2016-2018. The sample used in this study is a company engaged in manufacturing. The type of data used in this research is documentary data. The data source in this study is a secondary data source which is a source of research data obtained by researchers indirectly through intermediary media (obtained and recorded by other parties). This research was conducted by collecting company data on the Indonesia Stock Exchange (IDX) at the Faculty of Economics and Business at the Muhammadiyah University of Gresik. In addition, data collection was also carried out through the website [www.idx.co.id](http://www.idx.co.id).

#### 3.2 Research Variables

##### 3.2.1 Earnings Management Earnings

Management is the actualization of earnings as an opportunistic act of managers. The proxy used is the value of *discretionary accruals* calculated by *The Angelo Model* (Dechow, 1995 cited by Azlina, 2010) to measure the level of earnings management. To measure *discretionary accruals*, we will first measure total accruals.

Note:

TA = Total Accruals

Earn = Net profit

CFO = Operating cash flow

Ø the Angelo Model

This model uses the previous period's total accruals divided by the difference in the previous period's total assets to measure *non-discretionary accruals*. The calculation model is as follows:

Description:

DAit : *discretionary accruals* in year t.

TAit : company's total accruals year t.

TAit-1 : company's total accruals in year t-1.

Ait : total assets in year t.

### 3.2.2 Debt to Equity Ratio (DER)

The higher the proportion of DER, the more erratic the company's profits are and the more likely it is that the company cannot meet its debt payment obligations. Therefore, the higher the proportion of the debt ratio, the higher the *financial* a company (Nurfadillah, 2016).

### 3.2.3 Debt to Assets Ratio (DAR)

Debt ratio is a measure used in analyzing financial reports to show the amount of collateral available to creditors. The lower the debt ratio, the higher the profit so that the greater the creditor's guarantee for repaying the loan provided by the company (Fahmi, 2012).

## 4. Research Results

### 4.1 Descriptive Statistics

This study uses the independent variables *debt to equity ratio*, *debt to asset ratio*, and *long term debt to equity ratio* and earnings management as the dependent variable. Statistical measurements are very useful because they facilitate observation by describing the sample in an outline, so that it is close to the truth of the population (Ghozali, 2013). This means that descriptive statistical analysis describes the characteristics or state of a data in general regarding the observed variables. The results of descriptive statistical analysis can be seen in table 1.

Table 1

#### Descriptive Research Variable

	Descriptive Statistics				
	N	Minimum	Maximum	Mean	Std. Deviation
Profit management	120	-.20	3.63	.0301	.38402
Debt to Equity Ratio	120	.11	4.19	.8030	.78640
Debt to Asset Ratio	120	.10	4.14	.4024	.39174
Long Term Debt to Equity Ratio	120	.01	.80	.1709	.17591
Valid N (listwise)	120				

Source: Data processed with SPSS

From the table above it is known that the description of research data in general. The amount of research data is 120 pieces. The results of the analysis using descriptive statistics on earnings management obtained the lowest value of -0.20 and the highest value of 3.63. The average sample company produces an earnings management value of 0.0301. The earnings management gap between sample companies is represented by a standard deviation value of 0.38402.

Furthermore, the description of the data on the *Debt to equity ratio* from the lowest research sample is worth 0.11. While the highest value is 4.19. The average DER of the research sample is 0.8030. The gap value or standard deviation for this variable is 0.78640.

The next description of statistical data is related to data from the *Debt to asset ratio* from the lowest research sample which is worth 0.10. Meanwhile, the highest value is 4.14. The average DAR of the research sample is 0.4024. The gap value or standard deviation for this variable is 0.39174.

The last is a description of the data for the *Long term debt to equity ratio* from the lowest research sample which is 0.01. Meanwhile, the highest value is 0.80. The LTDER of the research sample averages 0.1709. The gap or standard deviation value for this variable is 0.17591.

#### 4.2 Normality

Normality test is used to determine whether the data used in this study is normally distributed or not. Data normality testing can be done in two ways, namely by graphical analysis and statistical tests. The purpose of normally distributed data is that the data will follow the shape of the normal distribution. The following are the results of the normality test in this study.

**Table 2**  
**Nonparametric Kolmogorov-Smirnov**  
**One-Sample Kolmogorov-Smirnov Test**

		Unstandardize d Residual
N		113
Normal	Mean	.0000000
Parameters(a,b)	Std. Deviation	.04961488
Most Extreme	Absolute	.071
Differences	Positive	.061
	Negative	-.071
Kolmogorov-Smirnov Z		.753
Asymp. Sig. (2-tailed)		.622

a Test distribution is Normal.

b Calculated from data.

Source: Data processed with SPSS

Based on table 4.2 above, the value of the Kolmogorov-Smirnov Statistical Test is 0.753 with a significant value of  $0.622 > 0.05$ . This means that  $H_0$  is accepted which indicates that the residual data is normally distributed.

The normality test can also be seen in the Normal P-Plot and Histogram graphs as follows:

Normal P-P Plot of Regression Standardized Residual

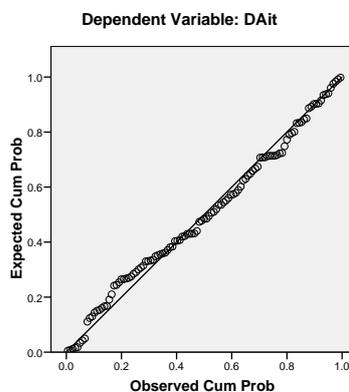


Figure 1. Normal P-Plot Graph

Source: Data processed with SPSS

Figure 4.1 shows the results of the normality test using the PP Plot chart. From the results of this graphical test it is known that the data spreads around the diagonal line and follows the direction of the diagonal line or the histogram line shows a normal distribution pattern, so the regression model meets the assumption of normality. Below is an image of histogram charts:

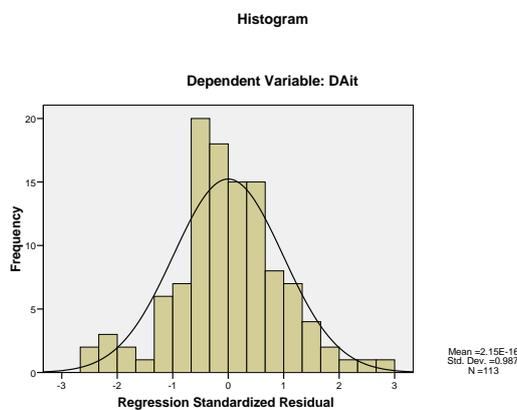


Figure 2 Histogram charts

Source: Data processed with SPSS

### 4.3 Multicollinearity Test Multicollinearity

It is one of the classic assumptions that often occurs in explanatory research, especially in research that uses regression as a test tool. Multicollinearity symptoms are symptoms in which there is a correlation between the independent variables. This phenomenon does not occur in research that uses a simple regression test, because simple regression only tests research

with one independent variable. To detect the presence or absence of multicollinearity, data testing is carried out by looking at the *Variance Inflation Factor (VIF)* and *Tolerance*. The following are the results of the multicollinearity test:

**Table 3**  
**Multicollinearity Test Results**

Model		Coefficients (a)					Collinearity Statistics	
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	B	Std. Error
		B	Std. Error	Beta	Tolerance	VIF	B	Std. Error
1	(Constant)	-.017	.008		-2.213	.029		
	Debt Equity Ratio	.009	.007	.136	1.156	.250	.640	1.563
	Debt Asset Ratio	-.001	.013	-.005	-.047	.963	.821	1.219
	Long Term Debt Equity Ratio	-.066	.032	-.225	-2.062	.420	.741	1.349

Variable: Profit Management

Source: Data processed with SPSS

Based on the Multicollinearity Test results in table 4.3 above it can be seen that all of the *tolerance* > 0.1 and VIF value < 10, where *tolerance* and VIF values for each variable DER = 0.250 > 0.1 and 1.156 < 10 DAR variable 0.963 > 0.1 and -0.047 < 10. For LTDER variable = 0.420 > 0.1 and -2.062 This shows that the independent variable does not have multicollinearity, and it can be said that the data in this study using the multicollinearity test are fulfilled.

#### 4.4 Autocorrelation Test

This test aims to test whether in the linear regression model there is a correlation between confounding errors between observation periods. If there is a correlation, it can be interpreted that there is an autocorrelation problem. The way to detect autocorrelation problems is to use the Durbin Watson (DW) test and then compare the test results with the Durbin Watson (DW) table.

**Table 4**  
**Autocorrelation**

Model Summary (b)					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.195(a)	.038	.011	.05029	1.727

Predictors: (Constant), LTDER, DAR, DER

b Dependent Variable: DAit

Source: Data processed with SPSS

Based on table 4.4 Durbin Watson test above, the value of d is calculated. This calculated d value is compared with the d table value to determine the upper limit (dU) and lower limit (dL) according to the decision making criteria for the occurrence of autocorrelation symptoms. The dU and dL values were obtained from the Durbin Watson table with the sample criteria used being n=120 and 4 independent variables (k=4). The d result is 1.727 while the dL result is 1.7323 and dU is 1.6445 which means d < dL. So that produces 1.727 < 1.7323. So it can be concluded that there is a negative autocorrelation.

### 4.5 Heteroscedasticity

Test Heteroscedasticity test aims to test whether in the regression there is an inequality of variance from the residual of one observation to another. Heteroscedasticity shows the distribution of independent variables. Random distribution indicates a good regression model. In other words, there is no heteroscedasticity. To test heteroscedasticity can be done by observing the scatterplot graph with a pattern of dots that spread above and below the Y axis.

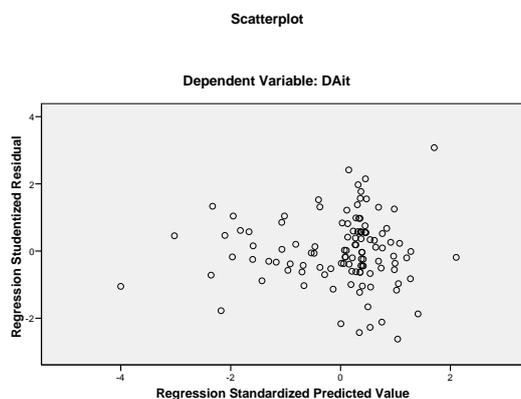


Figure 3 Scatterplot of Heteroscedasticity Test Results

Source: Data processed with SPSS

In the scatterplot image it can be seen that the dots spread randomly and are scattered both above and below zero on the Y axis. It can be concluded that there is no heteroscedasticity in this regression model.

### 4.6 Multiple Linear Regression Tests

In this study multiple linear regressions were used to determine the effect of disclosing the *debt to equity ratio*, *debt to asset ratio* and *long term debt to equity ratio* on earnings management in manufacturing companies listed on the IDX in 2016-2018. Based on the calculations, the following results are obtained:

Table 6

Multiple Linear Regression Test Results

		Coefficients (a)					Collinearity Statistics	
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	B	Std. Error
		B	Std. Error	Beta				
1	(Constant)	-.017	.008		-2.213	.029		
	Debt to Equity Ratio	.009	.007	.136	1.156	.250	.640	1.563
	Debt to Asset Ratio	-.001	.013	-.005	-.047	.963	.821	1.219
	Long Term Debt to Equity Ratio	-.066	.032	-.225	-2.062	.042	.741	1.349

Variable: Earnings Management

Source: Appendix 10

Table 4.6 shows the results of multiple linear regression which can be arranged into the regression equation as follows:

$$Y = -0.017 + 0.009(x1) - 0.001(x2) - 0.066(x3) + e$$

The regression equation has the following meanings:

1. The constant value is -0.017. The constant value for the regression equation is -0.017 with negative parameters. This means that without disclosing the *debt to equity ratio*, *debt to asset ratio* and *long term debt to equity ratio*, earnings management in manufacturing companies listed on the IDX in 2016-2018 is -0.017.
2. The regression coefficient of the *Debt to Equity Ratio* (X1) variable is 0.009, this result states that for every increase in the *Debt to equity ratio* by one unit, the earnings management variable will increase by 0.009.
3. The regression coefficient of the *Debt to Asset Ratio* (X2) shows a value of -0.001, this result means that when the *Debt to asset ratio* increases by one unit, the earnings management variable increased by -0.001.
4. The regression coefficient of the variable *Long Term Debt to Equity Ratio* (X3) is -0.066, this indicates that when the *Long Term Debt to Equity Ratio* variable increases by one unit, the earnings management variable will decrease by -0.066.

#### 4.7 Research Results

##### 4.7.1 Simultaneous Hypothesis

Testing This test aims to measure the effect of the *debt to equity ratio*, *debt to asset ratio* and *long term debt to equity ratio* simultaneously / jointly affect earnings management. The results of the F test calculations can be seen in the following table:

**Table 4.7**

**Simultaneous Hypothesis Testing Results (F Test)**

ANOVA (b)						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.011	3	.004	1.432	.237(a)
	Residual	.276	109	.003		
	Total	.287	112			

a Predictors: (Constant), Long Term Debt Equity Ratio, Debt Asset Ratio, Debt Equity Ratio

b Dependent Variable: Profit Management

Source: data processed by SPSS

Based on table 4.7, a simultaneous test significant value of 0.237 is obtained, which is greater than  $\alpha$  (0.05). If seen from the significant value with the alpha value above, it can be concluded that simultaneously the variables *debt to equity ratio*, *debt to asset ratio*, and *long term debt to equity ratio* have no effect on earnings management.

##### 4.7.2 Partial Hypothesis Test

(0.05) then  $H_0$  rejected and  $H_{a\alpha}$  is accepted, meaning that partially there is an influence between the variables *debt to equity ratio* (X1), *debt to asset ratio* (X2), and *long term debt to equity ratio* (X3) on earnings management (Y).

(0.05) then  $H_0$  accepted and  $H_{a\alpha}$  is rejected, meaning that partially there is no effect between the variable *debt to equity ratio* (X1), *debt to asset ratio* (X2), and *long term debt to equity ratio* (X3) on earnings management (Y).

**Table 8**

**Results of Partial Hypothesis Testing (T Test)**

		<b>Coefficients (a)</b>							
Model		Unstandardized		Standardized		T	Sig.	Collinearity	
		Coefficients		Coefficients				Tolerance	VIF
1	(Constant)	-.017	.008			-2.213	.029		
	Debt to Equity Ratio	.009	.007	.136		1.156	.250	.640	1.563
	Debt to Asset Ratio	-.001	.013	-.005		-.047	.963	.821	1.219
	Long Term Debt to Equity Ratio	-.066	.032	-.225		-2.062	.042	.741	1.349

Variable: Profit Management

Source: Data processed by SPSS

Based on table 4.12 above, the following results are obtained:

1. *Debt to equity ratio* has no significant effect on earnings management. This is evidenced in the table above that the significant value of the *debt to equity ratio* is 0.250, which means it is greater than 0.05.
2. *Debt to asset ratio* has no significant effect on earnings management. This can be proven in the table above that the significant value of the *debt to asset ratio* is 0.963, which means it is greater than 0.05.
3. *Long term debt to equity ratio* has a significant effect on earnings management. This can be proven in the table above that the significant value of the *long term debt to equity ratio* is 0.042, which means it is smaller than 0.05.

Based on the comparison between T count and T table, it can be seen that T count variable *debt to equity ratio* is  $1.156 < 1.65810$ . So the conclusion is that H0 is accepted and H1 is rejected. The second hypothesis T calculates the variable *debt to asset ratio* of  $-0.047 < 1.65810$ . So the conclusion is that H0 is accepted and H1 is rejected. Furthermore, the third hypothesis T calculates the variable *long term debt to equity ratio* of  $-2.062 > 1.65810$ . So the conclusion is H0 is rejected and H1 is accepted.

#### 4.7.3 Test of the Coefficient of Determination

The coefficient of determination test is used to measure how much the independent variable can explain the dependent variable. The intensity of the influence can be seen from the *Adjusted R Square value*. The following are the results of the coefficient of determination test:

**Table 9**

#### Test Results for the Coefficient of Determination

<b>Model Summary (b)</b>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.195(a)	.038	.011	.05029	1.727

Predictors: (Constant), Long Term Debt Equity Ratio, Debt Asset Ratio, Debt Equity Ratio

b Dependent Variable: Profit Management

Source: Appendix 10

It can be seen in table 4.13 above, Adjusted R Square has a value of 0.011 which means that the variable *debt to equity ratio*, *debt to asset ratio*, and *long term debt equity ratio* are able to explain the earnings management variable of 1.1%. While the remaining 98.9% is caused by other factors that are not in this model. value *R Square* is 0.038, meaning that the variation in the independent variables is able to explain the related variables by 3.8%, the remaining 96.2% is caused by

other factors that are not present in this model. While the value of  $R$  is 0.195 which means the strength of the relationship between the independent variables together with the related variables is 19.5%.

#### 4.8 Discussion

##### 4.8.1 Effect *Debt to Equity Ratio* on Earnings Management

Based on the results of testing the variable *Debt to Equity Ratio* has a coefficient value of 0.250 which is greater than the significant value of  $\alpha$  (0.05). From the test results that the *Debt to Equity Ratio* has no effect on earnings management. This research is in line with (Iety, 2015) that the *Debt to Equity Ratio* has no effect on earnings management. This is because management does not really consider the *Debt to Equity Ratio* in managing earnings.

##### 4.8.2 Effect *Debt to Asset Ratio* on Earnings Management

Based on the results of testing the variable *Debt to Asset Ratio* has a coefficient value of 0.963 which is greater than the significant value of  $\alpha$  (0.05). From the test results that the *Debt to Asset Ratio* has no effect on earnings management. This research is not in line with (Santhi, 2012) that the *debt to asset ratio* has a significant effect on earnings management. The higher the *Debt to Asset Ratio*, the lower the company's management for earnings management. But this research is in line with (Jao, R., & Pagalung 2011) that the *Debt to Asset Ratio* has no effect on earnings management.

##### 4.8.3 Effect *Long Term Debt to Equity Ratio* on Earnings Management

Based on the results of testing the *Long Term Debt to Equity Ratio* has a coefficient value of 0.042 which is smaller than the significant value of  $\alpha$  (0.05). The test results show that the *Long Term Debt to Equity Ratio* has an effect on earnings management. This research is in line with (Zahro, et al. 2013) which explains that the *Long Term Debt to Equity Ratio* has a significant effect on earnings management. The higher the *Long Term Debt to Equity Ratio*, the lower the company's earnings management actions.

## 5. Conclusion

### 5.1 Conclusion

1. *Debt to Equity Ratio* in this study has no effect on earnings management. Based on the results of testing the variable *Debt to Equity Ratio* has a coefficient value of 0.250 which is greater than the significant value of  $\alpha$  (0.05). From the test results that the *Debt to Equity Ratio* has no effect on earnings management. This indicates that the greater the *Debt to Equity Ratio*, the greater the opportunity for company management to take earnings management actions, and the smaller the *Debt to Equity Ratio*, the smaller the opportunities for management to take earnings management actions.
2. *Debt to Asset Ratio* in this study has no effect on earnings management. Based on the results of testing the variable *Debt to Asset Ratio* has a coefficient value of 0.963 which is greater than the significant value of  $\alpha$  (0.05). From the test results that the *Debt to Asset Ratio* has no effect on earnings management. This indicates that the higher the *Debt to Asset Ratio*, the lower the opportunity for company management to take earnings management actions.
3. *The Long Term Debt to Equity Ratio* in this study influences earnings management. Based on the results of testing the variable *Long Term Debt to Equity Ratio* has a coefficient value of 0.042 which is smaller than the significant value of  $\alpha$  (0.05). The test results show that the *Long Term Debt to Equity Ratio* has a significant effect on earnings management. This means that the lower the *Long Term Debt to Equity Ratio*, the greater the opportunity for company management to take earnings management actions, and the smaller the *Long Term Debt to Equity Ratio*, the smaller the chance for management to take earnings management actions.

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