

# Analysis of Debt Effect on Profitability of Manufacturing Companies in Indonesia

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**Abstract.** This study aims to examine whether short term debt has a negative effect on company profitability and to test whether long term debt has a negative effect on the profitability of manufacturing companies in Indonesia which are listed on the Indonesia Stock Exchange during the 2014-2018 period. This study has 1 dependent variable namely profitability and uses 2 independent variables namely short term debt and long term debt, and uses 2 control variables namely liquidity and firm size. This study uses secondary data with database collection techniques. The sample of this study was 432 companies in 5 years of research. The data analysis technique used is multiple linear regression analysis through the application of SPSS 22. The results found that short term debt has a negative effect on company profitability and long term debt has a negative effect on company profitability. This shows that the lower the company's debt, the higher the profitability a company will get and otherwise.

**Keywords:** Short term Debt, Long term Debt, Profitability, Manufacturing

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## Introduction

The current pace of economic growth has forced companies to continue to innovate to advance their excellence on the world stage. All aspects get updates both in terms of promotion, design, product, and packaging. This is nothing but aimed at supporting the company to have its value in the eyes of consumers and continue to operate to get as much profit. It is undeniable that capital is the key. The company can fulfill all its activities by using the source of funds owned by the company, however, if the company's needs increase and the source of funds owned by the company starts to run low then another alternative is needed in the form of additional sources, namely debt.

Debt will be an option if there is no better alternative to funding. Debt can be interpreted as a sacrifice in the future obtained from current economic benefits in terms of providing services or goods as a result of a transaction (Kieso, Donald, & Weggant, 2011). Debt is specified in 2 namely short term and long term (Fahmi, 2013). Short term debt, which is an obligation to interested parties that must be paid by maturity, that is, less than a year. Long term debt, which is an obligation to an interested party that is settled with a maturity of more than 1 year. It should be noted in terms of the use of debt because the debt is too much and not well controlled can cause companies to difficult to pay off obligations in the future. There is something that is no less important for the sustainability of a company, namely profitability.

Profitability can be interpreted as an ability to generate profits by using the capabilities of the company (Hantono, 2018). For companies, the problem of profitability is very important and must be in a favorable condition because it will have an impact on the survival of a company. This is because when the company is profitable it attracts investors to invest in the company. Investment can increase profits for a company and can advance the company in the future. Profitability can be obtained more and more if all employees also take part in it, however, if only a handful of those who play an active role in advancing the company will have an impact on declining profits even though other things can cause profitability to decline.

Although many previous studies have discussed the effect of debt on profitability, the results of the study are still inconsistent. The difference is seen in several studies such as research conducted abroad, the results

show a negative relationship between debt and corporate profitability (Gill, Biger, & Mathur, 2010). Other studies from abroad confirm negative results between the use of trade credit as a source of finance and company profitability (Yazdanfar & Ohman, 2015).

Other studies also confirm that short term debt and long term debt negatively effect profitability (Habib, Khan, & Wazir, 2016). The same result also states that debt is significantly negative towards the profitability of the company (Yazdanfar & Ohman, 2016). The sample used is the middle company in Sweden and uses control variables namely liquidity, firm size and firm age. Negative results between debt and corporate profitability are also found domestically, namely, research conducted by Hosea, Sulistyadi, & Ispriyahadi (2017). The results of the study suggest that debt has a negative effect on ROE (Rehman, Fatima, & Ahmad, 2012).

Unlike the case with research conducted abroad showing a positive relationship between trade payables and company profitability (Makori & Jagongo, 2013). Some research conducted in the country also states that long term debt has a significant positive effect on ROE (Yani, 2016). The same results also reveal that debt has a positive effect on profitability (Rosita & Gantino, 2017). This is also supported by the results which mention that debt has a positive effect on profitability (Safa & Maulana, 2017).

## Theory and Literature Review

### *Pecking Order Theory*

The Pecking Order Theory was first put forward by Donaldson (1961). The theory explains why companies with high profits tend to have low debt. The theory explains the company's decision to manage funding which suggests that companies will tend to choose internal funding in advance to meet the needs of the company rather than directly using external funds. The stages in this theory are first, the company uses internal funding obtained from operating income. Second, the determination of the dividend payout ratio. Third, if funds from outside the company are needed, the company will issue securities as an alternative and then use debt and shares as the last option to be made. This theory explains that the company will issue the safest securities by utilizing

debt and then issuing shares when the company needs additional funds.

### *Literature Review*

The researcher's contribution is trying to fill in the empirical literature regarding the negative effect of debt on firm profitability. The difference in results from previous studies makes researchers interested in doing the research. The researcher will expand the previous research, the sample used in manufacturing companies in Indonesia which are listed on the Indonesia Stock Exchange. Researchers hope that by analyzing the effect of debt on profitability will be able to provide an overview and suggestions related to the use of debt that will effect the profitability of a company.

This research is a replication of Yazdanfar & Ohman (2016). This research is different from previous studies. The difference is the sample used, namely manufacturing companies in Indonesia which are listed on the Indonesia Stock Exchange from 2014 to 2018. This study uses a sample of manufacturing companies because in previous studies using middle to lower companies. In addition, researchers chose the manufacturing sector because the number of companies included in the category of manufacturing companies is more than other companies and manufacturing companies process all goods from raw goods to finished goods so that it is hoped that this study can represent the answer to whether debt has a negative effect on company profitability.

The independent variable used is debt that will be specified as short term debt and long term debt and uses one dependent variable, profitability. This study uses two control variables namely liquidity and firm size. This study is expected to test whether the short term debt has a negative effect on company profitability and to test whether the long term debt has a negative effect on company profitability.

### *Hypothesis Development*

Debt is an obligation of a company to another party within a predetermined period. Debt is specified in 2 namely short term and long term (Fahmi, 2013). Short term debt, that is, a company's obligations to interested parties for a period of less than a year. A company usually uses short term debt for the purchase of goods or the use of services that are supporting the core activities of a company and support all activities required by employees. If the goods or services are not

carried out as quickly as possible, it is feared that this will have an impact on operational activities that are impeded. Utilization of this debt must also be managed properly because if it continues to make purchases that are not managed properly, it will cause so much expenditure that it does not add to profits for a company but it will be a decrease in profits obtained by a company and even companies can also suffer losses. This is caused because so much expenditure is not offset by the income that will be received by the company.

Short term debt has a negative effect on profitability. Based on the pecking order theory that explains why companies or agencies tend to have high profits and instead have low debt. This is because the company will make a funding decision by choosing internal funding first rather than using funds from outside the company. In this theory, the use of internal funding is very important for a company, of course, it needs good management related to company internal funding. Funding from outside the company is only used when internal funding can no longer accommodate all the costs of the company's operational activities. This is what causes when using a little debt will increase profitability and otherwise when using a lot of debt can reduce the profitability of the company itself.

The results of previous studies also have argued that debt negatively effect company profitability. Seen from Hosea, Sulistyadi & Ispriyahadi (2017) research shows that short term and long term debt has a negative effect on profitability. Other studies also explain short term and long term debt negatively effecting profitability (Habib, Khan, & Wazir, 2016). Unlike the case with Safa & Maulana's research (2017) which explains that there is a positive influence between short term and long term debt on company profitability.

Short term debt is defined as the ratio of short term debt paid to total assets (Habib, Khan, & Wazir, 2016). The dependent variable, profitability, can be defined as EBIT in proportion to total assets (Deloof, 2003). Based on these statements, the authors conclude the first hypothesis as follows:

H1a: Short term debt has a negative effect on company profitability

Long term debt is an obligation of a company within a period of more than a year. A company usually uses long term debt for leasing goods, buildings, land, machinery, and so on. Usually, the goods used are in the form of equipment to support the activities of a company. Companies usually lease buildings or land because the company area is

inadequate for storing the good goods that are not yet processed, semi-finished goods and goods ready for production. This rental is carried out by a company considering the price is relatively expensive if buying land or building, therefore the company takes another alternative to lease the land or building as long as the land used is insufficient for storage. If the land owned by the company is sufficient, the company no longer needs to lease the land or building.

Companies with certain considerations tend to prefer using long term debt rather than buying it. Usually companies that utilize the use of long term debt will make agreements in advance between the two parties. This needs to be done considering the use of land, buildings, machinery, and so on is used for a long time so there needs to be an agreement that binds both parties so that if something happens in the future there is a solution in solving the problem.

Long term debt has a negative effect on profitability. Based on the pecking order theory that explains why companies with high profits tend to have low debt, of course, because the company has a lot of funds that can sustain company activities by utilizing internal funding first. In this theory, the use of internal funding is very important for a company, of course it needs good management related to company internal funding. Funding from outside the company is only used when internal funding can no longer accommodate all the costs of the company's operational activities. This is what causes when using a little debt will increase profitability and otherwise when using a lot of debt can reduce the profitability of the company itself.

The results of previous studies have suggested that debt negatively effect profitability. Seen from research Habib, Khan, & Wazir (2016) show that short term and long term debt has a negative effect on profitability. Likewise with the results of research that explains that there is a negative influence between long term debt and company profitability (Yani, 2016). Unlike the case with the research studied by Safa & Maulana (2017) which explains the positive effect between short term and long term debt on company profitability.

Long term debt is defined as the ratio of long term debt paid to total assets (Habib, Khan, & Wazir, 2016). The dependent variable, profitability, can be defined as EBIT in proportion to total assets (Deloof, 2003). The author concludes the first hypothesis b as follows: H1b: Long term debt has a negative effect on company profitability

## Research methods

The research method used is a quantitative approach for testing hypotheses. The reason for choosing quantitative is related to the source of data derived from secondary data, namely the financial statements of manufacturing companies in Indonesia which are listed on the Indonesia Stock Exchange from 2014 to 2018. The quantitative approach is carried out to determine the relationship between variables in a population. The independent variable used is short term debt and long term debt and the dependent variable is profitability. This study uses control variables such as liquidity and firm size.

### *Dependent Variables - Profitability*

Profitability is defined as the ability carried out by companies in generating profits. Profitability is a proxy by Basic Earning Power (BEP). BEP is used as a way of assessing a company's performance in earning profit before tax and interest that is dividing by total assets. This ratio can describe the effectiveness and efficiency of a company's investment management in a certain period. The higher the ratio obtained by the company will lead to more effective and efficient asset management in obtaining the profit owned by a company.

The use of ratios is different from previous studies in Indonesia, many previous studies use ROA and ROE to assess a company's ability to generate profits. The way to calculate BEP is net income before tax divided by total assets (Deloof, 2003). Basic Earning Power (BEP) can be formulated as follows:

$$\text{BEP} = \frac{\text{Earning Before Interest and Taxes}}{\text{Total Asset}}$$

### *Independent Variable - Debt*

Debt is used as an alternative source of financing for the company's operational needs. Debt is one of the best solutions for companies that are experiencing shortages of funds. Debt is specified as 2 namely short term debt and long term debt. Short term debt is proxied from Short Term Debt to Asset while long

term debt is proxied from Long Term Debt to Asset. This ratio is used in measuring the level of solvency. A company can be said to be solvable if the company has sufficient assets to fulfill its obligations. The higher the ratio will have an impact on the greater the number of loans made by a company. The short term debt formula (STDA) and the long term debt (LTDA), namely (Habib, Khan, & Wazir, 2016):

$$\text{STDA} = \frac{\text{Short Term Debt}}{\text{Total Asset}}$$

$$\text{LTDA} = \frac{\text{Long Term Debt}}{\text{Total Asset}}$$

#### *Variabel Kontrol-Liquidity*

Liquidity can be seen from the size of the current assets of a company. Liquidity is used as a way to assess how much a company can meet financial viability, namely debt. Liquidity is proxied by dividing current assets by current debt (Nunes, Viverios, & Serrasqueiro, 2012). The formula for calculating liquidity is as follows:

$$\text{Liquidity} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

#### *Variabel Kontrol-Firm Size*

The size of the company is the scale of assets and sales. The greater the assets and sales will impact the greater the size of the company. The more assets and sales will have an impact on the more money turnover to make the company known to the public. Firm size is proxied by the natural logarithm of total sales (Garcia-Teruel & Martinez-Solano, 2007). Firm size can be formulated as follows:

$$\text{Firm Size} = \text{LN Total Revenue}$$

#### *Data Processing Techniques*

There are several steps in data processing, first, choosing variables to be included in the table. Second, tabulating data uses the summarizing process in Microsoft Excel, which is summarizing data according to the needs of the study. The data is then processed using Microsoft Excel so that the data is ready for use. Third, perform data processing using SPSS 22. The method of analysis in this study uses descriptive statistics, classic assumption tests, and multiple linear

regression analysis. The regression models in the study are:

$$Y = a + b_1 \text{STDA} + b_2 \text{LTDA} + b_3 \text{Liq} + b_4 \text{Size} + e$$

Model 1a:

$$Y = a + b_1 \text{STDA} + b_2 \text{Liq} + b_3 \text{Size} + e$$

Model 1b :

$$Y = a + b_1 \text{LTDA} + b_2 \text{Liq} + b_3 \text{Size} + e$$

#### *Objects/Data, Population and Samples*

The research method used is quantitative. The research data used are secondary data sourced from www.idx.co.id and using ratio data. The object of research was taken from the Indonesia Stock Exchange, namely the Financial Statements of manufacturing companies listed on the Indonesia Stock Exchange from 2014 to 2018 from companies listed and still active on the Indonesia Stock Exchange.

The population in this study is all manufacturing companies listed on the Stock Exchange which are 764 companies, where these companies publish their financial statements to the general public. The sample in this study was manufacturing companies in Indonesia which were listed on the Indonesia Stock Exchange in the 2014-2018 period with a sampling technique that was purposive sampling. The criteria used in obtaining the sample are as follows:

1. Manufacturing companies in Indonesia which were listed on the Indonesia Stock Exchange during the 2014-2018 period.
2. Companies that provide complete financial statements for the 2014-2018 period.
3. Companies that present financial statements in Rupiah (Rp).

## **Results and Discussion**

#### *Description of Research Samples*

The population data in this study are manufacturing companies in Indonesia which are listed on the Indonesia Stock Exchange from 2014 to 2018, which is 764 companies. Based on the research criteria of the sample, the total sample during 2014-2018 that met the established criteria was 432 companies. In the following table 1 shows the process of determining the sample:

Table 1  
Description of Samples Based on Research Criteria

Company Indications	2014	2015	2016	2017	2018	Total
Manufacturing companies listed on the Indonesia Stock Exchange in 2014-2018	144	146	149	159	166	764
Manufacturing companies that did not provide complete financial reports for the 2014-2018 period	(27)	(24)	(22)	(0)	(2)	(75)
Companies that present financial statements in currencies other than Rupiah	(28)	(28)	(28)	(30)	(30)	(144)
Data of companies experiencing outliers	(13)	(16)	(19)	(29)	(36)	(113)
<b>Company Final Samples</b>	<b>76</b>	<b>78</b>	<b>80</b>	<b>100</b>	<b>98</b>	<b>432</b>

### Descriptive Statistics

Based on the results of descriptive statistical tests using SPSS in table 2, it can be seen that the sample of this study is 432. This study examines 1 dependent variable namely profitability which is measured using BEP (Basic Earning Power). The average company in generating profits of 0.0627 with a standard deviation of 0.0666. Highest net profit of 0.2801. Loss before tax of -0.2394. This study uses 2 independent variables, namely short term debt (STDA) and long term debt (LTDA). The first proxy using short term debt (STDA) produces an average of 0.3235. The standard deviation of short term debt is 0.1688. The highest value of short term debt of 0.8261 and the lowest value of short term debt of 0.0440. The second proxy, namely long term debt (LTDA) produces an average of 0.1140. The standard deviation of long term debt is 0.0959. The highest value of long term debt of 0.5260. The lowest value of long term debt of 0.0006.

This study uses two control variables namely liquidity and firm size. The first proxy is liquidity

obtained by an average of 2.3568 and a standard deviation of 1.8243. The highest value of liquidity is 15.8223 while the lowest value is 0.2667. The second proxy is the size of the company obtained an average of 14,2029 with a standard deviation of 1.4126. The highest value of the size of the company is 17,8037 while the lowest value of the size of the company is 11,0471. Outliers data is data that has a value that is very far from its general value, or in other words, it has an extreme value. The cause in this study has 113 outlier data, which comes from the population taken as a sample, but the distribution of the variables in the population has an extreme value so that the data is not normally distributed.

Table 2  
Descriptive Statistics

	Descriptive Statistics				
	N	Min	Max	Mean	Std Dev.
BEP	432	-0.2394	0.2801	0.0627	0.0666
STDA	432	0.0440	0.8261	0.3235	0.1688
LTDA	432	0.0006	0.5260	0.1140	0.0959
LIQ	432	0.2667	15.8223	2.3568	1.8243
FS	432	11.0471	17.8037	14.2029	1.4126

Before testing the hypothesis that has a goal that is seeing whether there is an influence between the independent variables on the dependent variable. Research data must be tested with classic assumptions first. The classic assumption test used is the normality test, heteroscedasticity test, and multicollinearity test.

### Normality Test

Table 3  
Normality Test Results

Ket	Value of Sig K-S	Conclusion
Asymp. Sig. (2-tailed)	0.200	Data is normally distributed

As can be seen in Table 3, the results of normality testing through one sample Kolmogorov-Smirnov explained the significance value of 0.200. The results obtained have a value greater than 0.05 so that the profitability variable (BEP), short term debt (STDA),

long term debt (LTDA), liquidity (LIQ), and firm size (FS) in this study are normally distributed.

*Heteroscedasticity Test*

Table 4  
Heteroscedasticity Test Results

Variable	Sig	Conclusion
STDA	0.437	Heteroscedasticity does not occur
LTDA	0.575	Heteroscedasticity does not occur
LIQ	0.565	Heteroscedasticity does not occur
FS	0.405	Heteroscedasticity does not occur

The heteroscedasticity test is done by the glacier test. The results of table 4 explain that the significance value of the variable is greater than 0.05, it can be concluded that short term debt (STDA), long term debt (LTDA), liquidity (LIQ) and firm size (FS) with the dependent variable namely the profitability variable (BEP) does not experience heteroscedasticity problems.

*Multicollinearity Test*

Table 5  
Multicollinearity Test Results

Variable	VIF	Conclusion
STDA	1.821	There is no multicollinearity
LTDA	1.114	There is no multicollinearity
LIQ	1.866	There is no multicollinearity
FS	1.076	There is no multicollinearity

It can be seen in Table 5, the results of multicollinearity testing explain that the VIF value is less than 10.00. This explains that the value of the variable short term debt (STDA), long term debt (LTDA), liquidity (LIQ), and firm size (FS) with the dependent variable namely profitability (BEP) does not experience multicollinearity problems.

**Results and Discussion**

Table 6  
Hypothesis Testing Results of First a

Variable	Regression Coefficient	t-count	Sig
Constant	-0.186	-6.019	0.000

Variable	Regression Coefficient	t-count	Sig
STDA	-0.099	-4.776	0.000
LIQ	0.009	4.513	0.000
FS	0.018	9.550	0.000
R-square = 0.321			
F-count = 67.530			
Sig (f) = 0.0000			

Based on table 6, it explains that the f count is 67,530 and the sig obtained is 0,000. This explains if the value of sig <0.05, so it can be concluded that the short term debt (STDA), liquidity (LIQ), and firm size (FS) jointly influence and significant effect on profitability (BEP). The value of the coefficient of determination (R-square) obtained is 0.321. This explains that 32.1% profitability (BEP) is influenced by independent variables namely short term debt (STDA) and control variables in the form of liquidity (LIQ) and firm size (FS) while the remaining 67.9% is explained by other variables outside the study.

The first hypothesis with BEP (Basic Earning Power) proxy is obtained short term debt variable with t arithmetic of -4.776 and a significance value of 0.000. This value is less than 0.05, so it can be concluded that the H1a hypothesis is supported. There are two control variables used namely liquidity (LIQ) and firm size (FS). Both of these control variables have a sig value (0,000 <0.05) so that the results obtained are liquidity and firm size effect the company's profitability (BEP) and have a positive direction.

Table 7  
Hypothesis Testing Results of First b

Variable	Regression Coefficient	t-count	Sig
Constant	-0.260	-9.358	0.000
LTDA	-0.146	-5.116	0.000
LIQ	0.014	9.497	0.000
FS	0.022	11.174	0.000
R-square = 0.327			
F-count = 69.339			
Sig (f) = 0.0000			

Based on Table 7, it shows that the f count is 69.339 and the sig obtained is 0.000. This explains if the value

of sig <0.05, so it can be concluded that long term debt (LTDA), liquidity (LIQ), and firm size (FS) jointly influence and significant effect on profitability (BEP). The value of the coefficient of determination (R-square) obtained is 0.327. This explains that 32.7% profitability (BEP) is influenced by independent variables namely long term debt (LTDA) and control variables in the form of liquidity (LIQ) and firm size (FS) while the remaining 67.3% is explained by other variables outside the study.

The first hypothesis b with the proxy BEP (Basic Earning Power) obtained long term debt variable with t arithmetic that is -5.116 and the significance value obtained is 0.000. This value is less than 0.05, so it can be concluded that the H1b hypothesis is supported. There are two control variables used namely liquidity (LIQ) and firm size (FS). Both of these control variables have a sig value (0,000 <0.05) so that the results obtained are liquidity and firm size effect the company's profitability (BEP) and have direction positive.

Based on the results of hypothesis testing between independent variables, control variables and dependent variables, a summary of the results of the hypothesis test can be seen in table 8 as follows:

Table 8  
Summary of Research Results

	Hypothesis	Results
H1a	Short term debt has a negative effect on company profitability	Supported
H1b	Long term debt has a negative effect on company profitability	Supported

*Short Term Debt has a Negative Effect on the Company's Profitability*

Based on the results of hypothesis testing, H1a states that short term debt has a negative effect on profitability. This is evidenced through the significance value obtained is 0,000, the value is less than 0.05 and the coefficient value is -0.099, so hypothesis 1a is supported. The results of this study are consistent with Hosea, Sulistyadi & Ispriyahadi (2017) and Habib, Khan, & Wazir (2016), who explained that the short term debt (STDA) has a negative effect on profitability (BEP). The results of this study explain if short term debt is one of the factors that can effect the profitability of a company. The results of this study are not in line with the study of Safa & Maulana (2017) which explains that there is

a positive influence between short term debt on company profitability.

Hosea, Sulistyadi & Ispriyahadi's (2017) research states that hotel companies in Indonesia have not utilized the use of debt effectively so that the increase in debt has a decreased impact on company profitability. Interest costs incurred as a result of using the company's external funding sources are not proportional to the profits received by the company. This is because these funding sources are more widely used to meet operational needs and banking obligations so that the increase in debt has a negative effect.

Habib, Khan, & Wazir (2016) research states that an increase in short term debt in the capital structure will result in a decrease in the company's profitability. This is due to the use of debt that is well controlled will be able to help the level of profitability of a company, but if they use of debt has exceeded the company's ability to pay the debt, it will pose a risk. One risk that arises is a decrease in profitability. This research is in line with the pecking order theory that describes companies or institutions that have small debts and instead have high profits. This is because the company uses more internal financing. If the company requires additional funds, it prefers safe securities namely retained earnings, debt, and issuing shares.

This means that the company will seek to obtain funds that are not at risk in advance. If it is not sufficient, the company will choose to fund with a small risk. Companies will tend to take advantage of company profits first and minimize the use of debt. This shows that the pecking order theory, the smaller the debt will result in the greater profitability obtained and vice versa, the greater the debt will have an impact on the lower profitability received by a company. It can be said that profitability can be a form of achievement of a company and short term debt can be an alternative that can be used to be able to maintain profitability.

An example of the negative effect of short term debt on company profitability can be seen from, PT Alakasa Industrindo Tbk in 2018 which has a short term debt value (STDA) of 0.8261 or 82.61% while profitability is proxy through Basic Earning Power (BEP) which is 0.0353 or 3.53 % with an average STDA and BEP of 0.3235 or 32.35% and 0.0627 or 6.27%. This value indicates that when a company's short term debt experiences a significant increase or is above the average value, it will cause a risk for a company, one of which is the company's profitability so that the company's profitability decreases or is below the average profitability (BEP).



### *Long Term Debt has a Negative Effect on the Company's Profitability*

Based on the results of hypothesis testing, H1b states that long term debt has a negative effect on profitability. This is proven by the significance value of 0.000, the value is less than 0.05 and the coefficient value obtained is -0.146, so that hypothesis 1b is supported. The results of this study are not in line with the study of Safa & Maulana (2017) which explains that there is a positive influence between long term debt on company profitability. In contrast to Safa & Maulana's research (2017), the results of this study support the results of Yani's (2016) study which explains that long term debt (LTDA) has a negative effect on profitability (BEP). The results of the study stated that long term debt is one of the factors that can affect profitability.

Habib, Khan, & Wazir (2016) research states that an increase in long term debt in the capital structure will result in a decrease in company profitability. This is due to the use of debt that is well controlled will be able to help the level of profitability of a company, but if they use of debt has exceeded the company's ability to pay the debt, it will pose a risk. One risk that arises is a decrease in profitability. Yani's research (2016) states that increasing debt will not cause increased profitability (ROE). This is due to the relatively high debt costs which will reduce the company's profitability. Increasing long term debt does not always spur efficiency and increase profitability when the company is in a difficult financial condition, it will force management to take quick steps.

This research is in line with the pecking order theory that describes companies or institutions that have small debts and instead have high profits. This is because the company uses more internal financing. If the company requires additional funds, it prefers safe securities namely retained earnings, debt and issuing shares.

This means that the company will seek to obtain funds that are not at risk in advance. If it is not sufficient, the company will choose funding with a small risk. Companies will tend to take advantage of company profits first and minimize the use of debt. This shows that the pecking order theory, the smaller the debt will have an impact on the greater the profitability obtained and vice versa.

Companies that have low profitability, the company more use of debt to meet the needs of the company, and vice versa the profitability tends to rise, the company will reduce or not even use the use of the debt. This is due to the company has distributed some

of the profits earned on retained earnings so that internal to fund is used first and minimize the use of debt. It can be said that profitability can be a form of achievement of a company and long term debt can be an alternative that can be used to be able to maintain profitability.

An example of the negative effect of long term debt on company profitability can be seen from PT Yanaprima Hestapersada Tbk in 2014 which has a debt value of 0.2004 or 20.04% and obtains corporate profitability of -0.0295 with average long term debt (LTDA) and Basic Earning Power (BEP) which is 0.1140 or 11.40% and 0.0627 or 6.27%. This value indicates that when a company's long term debt increases, it will cause a risk for a company, one of which is the company's profitability so that the company's profitability decreases whether the company's profit decreases or the company suffers a loss due to the use of less effective debt which impacts on the profitability of the company itself.

#### **Additional Analysis**

This study uses two control variables namely liquidity and firm size. Liquidity is calculated by way of current assets divided by current debt. Hypothesis testing results explain there is an influence between liquidity with profitability and positive direction. This reflects the efficiency of managing a company's current assets to increase profitability. This means that when the level of liquidity is good, the company will generate profits effectively thereby attracting investors to invest their capital in a company.

Firm size is calculated through the natural logarithm of sales. Hypothesis testing results explained there is an influence between firm size with profitability and positive direction. This is due to companies that have quite large sales more potential to have the ability to obtain higher profitability. Large sales can generate large profits if offset by the use of cost-efficient.

#### **Conclusions**

This study aims to examine whether the short term debt has a negative effect on company profitability and to test whether the long term debt has a negative effect on company profitability. from the test results in this study as follows:

1. Short term debt has a negative effect on company profitability. This explains that the lower the short term debt of the company, the higher the profitability of the company, and vice versa the

higher the short term debt, the lower the profitability of a company.

2. Long term debt has a negative effect on company profitability. This explains that the lower the long term debt of the company, the higher the profitability of a company, and vice versa the higher the long term debt, the lower the profitability of a company.

There are several limitations in this study, among others: First, this research is only limited to companies in the manufacturing sector which are listed on the Indonesia Stock Exchange so that it does not represent all companies in Indonesia. Second, the research period was only carried out for five years, namely 2014-2018, so the results could not be generalized for the previous year or after. Third, the measurement of the profitability variable only focuses on BEP (Basic Earning Power). Fourth, the control variable used only focuses on company liquidity and size. Fifth, the measurement of the debt variable only focuses on debt to total assets.

Based on the limitations described above, there are several suggestions for further research. First, further research is expected to expand the research sample, not only limited to the manufacturing sector but to add samples to all company sectors on the Indonesia Stock Exchange. Second, further research is expected to add a longer period so that it can illustrate the effect of debt on profitability. Third, further research is expected to increase the proxy used on profitability variables such as ROA, ROE, and profit margins. Fourth, further research is expected to add variables such as company age. Fifth, further research is expected to increase the proxy used on debt variables such as Total Debt to Equity Ratio and Times Interest Earned Ratio.

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