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THE DETERMINANTS OF CAPITAL STRUCTURE OF MANUFACTURING COMPANIES LISTED IN LQ45 INDEX IN INDONESIA STOCK EXCHANGE PERIOD 2010-2014

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Abstract: *The purpose of this study is to analyze the determinants of capital structure, consists of deficit, profitability and tangibility, and the influence of those variableson the use of short term debt, long term debt, and total debt, based on two perspectives namely peckingordertheory and trade-off theory. From the perspective of pecking order theory, company has a certain order to choose their financing decision. The order starts from internal to external financing. Thus, based on that, deficit has positive influence on the debts while profitability and tangibility have negative influence. From the perspective of trade off theory, debts are able to provide advantage to offset the tax value. Thus, deficit, profitability and tangibility have positive influence on the debts. The sample of this study is10 companies from manufacturing sector listed in LQ45 Index for period 2010-2014 with regressiontest as the analysis method. The results implied that in terms of the use of short term debt and total debt, financing decision of companieshad no path as suggested bypecking ordertheoryandtrade off theory, however, regarding the use of long term debt, the companies follow the specific order suggested by peckingordertheory.*

Keywords: *Deficit, Profitability, Tangibility, Total Debt, Pecking Order Theory, and Trade-off Theory*

1. INTRODUCTION

The company needed funding to carry out economic activities in the form of daily operational costs and cost of investment. At this time, the situation outside the company such as the drop in world oil prices and competition from different economic challenges require companies to be keen in arranging funding sources. When a company faces internal financial deficit, one of the things that can be done by the management is to re-evaluate the company's capital structure.At the time a firm faces a financial deficit that affects its financial condition so that the manager of the firm should be able to make a managerial decision as well as a financial decision in order to maintain the viability of the firm.

Selection of the appropriate capital structure of the company is to minimize the cost of capital as well as to maximize the company's value. Funding for the company can be collected from the internal source in the form of retained earnings and funding comes from external sources in the form of debt and the issuance of new shares. The theories most widely used in determining the company's capital structure are the trade off theory and pecking order theory.

Based on the pecking order theory, the company has funding levels to choose where the main order of most funding comes from internal source. When the internal funds are insufficient, pecking order theory suggests that the first choice of financing source is the use of debt then the issuance of new shares. This is motivated by the existence of asymmetric information between the company's internal and external parties, and the obligation to give the company's internal information is heavier when companies have listed in the stock exchange. Based on trade off theory, on the other hand, argued that there is a maximum point between debt and bankruptcy cost, which debt can reduce the tax burden of company so that the company does not have to see whether the internal fund is still sufficient or not.

Capital structure decision is also affected by firm's characteristics. These characteristics are potentially contentious (Titman and Wessels, 1988). Each theory of capital structure gives the different implication on how the firm's characteristics influence the firm's capital structure choices. In order to identify which of the firm's characteristics that have significant effect on capital structure based on theories in the context of Indonesian firms, so this research focuses on a group of variables identified from the previous studies. The selected explanatory variables are firm's deficit, profitability, and tangibility.

Both of pecking order theory and trade off theory have different perspective when they see the influence of deficit, profitability,and tangibility on the use of debt. For profitability, pecking order theory argues that firms with higher profitability will tend to have low debt as companies with high profitability are considered to have sufficient internal funding sources to finance the investments and deficit. On the other hand, trade-off theory argues that firms with high profitability should use debt as source of funding as debt is taxed deductible.

For tangibility, from pecking order theory perspective, firms with few tangible assets are more sensitive to informational asymmetries. These firms will thus issue debt rather than equity when they need external financing (Harris and Raviv, 1991), leading to an expected

positive relation between the tangible assets and leverage. According to trade-off hypothesis, tangible assets act as collateral and provide security to lenders in the event of financial distress. Hence, the tradeoff theory predicts a positive relationship between measures of leverage and the proportion of tangible assets.

This study used a sample of firms from manufacturing sector in LQ45 Index listed in Indonesia Stock Exchange. The main reason for the selection of the manufacturing companies, among others, due to manufacturing company has the greater value of fixed assets than the company in services sector that can run without having fixed assets. The fixed assets can be used as collateral for seeking financing source.The purpose of this study was to analyze the influence of internal financing deficit, profitability, and tangibility on the use of short-term debt, long-term debt, and total debt of the firms in the manufacturing sector listed in LQ45 Index from period 2010 to 2014.

2. LITERATURE REVIEW

2.1 Theory of Capital Structure

Modigliani and Miller suggest that the composition of the capital structure is an irrelevant factor in the company's market valuation. The Nobel Prizes has been awarded to Franco Modigliani in 1985 and Merton Miller in 1990 for their widely recognised contributions to financial theory. According to Modigliani and Miller (1963), if the company employs debt in its capital structure, it gets a certain tax shield, therefore the sum availables for sharing to the shareholders more in the case of a company with leverage than in a company with no leverage. In 1977, Merton Miller held that the capital structure decision is irrelevant even in the presence of corporate taxes and personal. Changes in capital structure had no impact on corporate valuation.

Firm’s capital structure decision can be viewed from the pecking order theory and trade-off theory which are the extension of the earlier theories.

Pecking Order Theory

According tothe pecking ordertheory, the companyfollows a specific order of preferencesinfinancingdecisions(Myers, 1984; MyersandMajluf, 1984). The firstpreferenceof financingis retained earnings. The main advantages of financing through retained earnings are that it has no related flotation costs, and retained earnings do not need external supervision by the owner of capital. When the internal funds are not sufficient to finance

the company's proposed investment, then the company resorts to debt financing. Debt typically grows when investment exceeds retained earnings and fall when investment is less than retained earnings.The advantages of issuing debt that it does not result indilution of equity capital and has no implications on the firm's stock ownership. The next way of financingin the hierarchy is the issuance of preference capital and followed by a variety of hybrid instruments such as convertible instruments. The least preferred mode of financing is issuing equity (Donaldson, 1961; Myers, 1984; MyersandMajluf, 1984). This preference could be due to the costs of issuing new equity, as a result of asymmetric information and transaction costs.

Trade-off Theory

Debt financing provides a tax shelter that increases the available remaining to be distributed to shareholders of equity, however, the disadvantage related with debt financing is the bankruptcy risk (Warner, 1977; HaugenandSenbet, 1978, AndradeandKaplan, 1998). The company tries totrade-off between the size of the tax shelter and financial distress costs. Firms with a stable revenue stream and sound asset base facing a lower risk of bankruptcy, hence this company can apply a moderately higher level of leverage in their capital structure. On the other hand, start-ups and high growth firms facing a higher probability of financial distress. The companies have the risk of uncertain cash flow streams and lower tangible asset base. Therefore, these companies are suggested to apply a lower level of leverage in their capital structure.

According to the trade-off theory, agency costs, taxes, and bankruptcy costs push more profitable firms toward higher book leverage. **I**n the agency models of Jensen and Meckling (1976), Easterbrook (1984), and Jensen (1986), higher leverage helps to control agency problems by forcing managers to pay out more of the firm’s excess cash. The deductability of corporate interest payments induces more profitable firms to finance with debt.

2.2. Previous Research Findings

The following are some previous research findings related to our research.

Profitability

According to Harris and Raviv (1991), Rajan and Zingales (1995), Booth et al (2001) that all things being equal, the more the firms are profitable, the more they will have internal financing, and therefore there was a negative relationship between leverage and

profitability. Jensen (1986) predicted a positive relationship between profitability and debt. Myers and Majluf (1984) explained that profitable firms which have access to retained profits, can use these for firm financing rather than accessing outside sources as stated by the pecking order theory.

Kester (1986) found that leverage was negatively related to profitability in both the US and Japan. Chang (1999) showed that profitable firms tended to use less debt. Meanwhile, Jensen, Solberg and Zorn (1992) found a positive one. According to Huang and Song (2002) that profitability had strong negative relation with total liabilities ratios.

Drobetz and Fix (2003) tested leverage based on predictions of the trade-off and pecking order models using Swiss data. Their results confirmed the pecking order model but contradicted with the trade-off model, that more profitable firms used less leverage. They found that profitability was negatively correlated with book leverage and market leverage.

Pandey (2001) results showed that profitability had a significant negative relation with all types of book and market value of debt ratios. He showed that these results confirmed findings of earlier studies and were consistent with pecking order theory (Myers, 1984).His results also showed that profitability tend to be the most dominant determinant of debt ratios of Malaysian firms as it generally had high beta coefficients and t-statistics that were significant at 1% level of significance.

Cole (2008) measured the relationship between profitability and the loan-to-asset ratio, and showed that profitability had a consistent negative relation with the loan-to-asset ratio. Thefindings were strongly support the pecking order theory, which predicted that more profitable firms used less debt because they could fund the projects with firm'sretained earnings.

In the study of Sbeiti (2010) found that firm profitability seemed to have a statistically negative significant relationship with book leverage and market leverage. The negative coefficient of profitability was the indication of the existence of asymmetricinformation and following the pecking order behaviorthat more profitable firms preferred internal financing to externalfinancing.

Research of Çağlayan and Şak (2010) examined the capital structure of banks, from the perspective of the empirical capital structure literature, for non-financial firms by using the method of panel data analysis. They tested which capital structure theory could explain the

capital structure choice of the banks in Turkish and identified two sub-periods to determine the differences across determinants of capital structure in the different periods after the financial crisis and restructuring periods. Their findings showed that profitability had negative effect on the book leverage.

In the Han-Suck Song (2005) study, they found that profitability was negatively correlated with all three leverage measures, which was in line with the pecking-order theory that firms preferred using surplus generated by profits as internal funds rather than external funds to finance investments, irrespective of the characteristic of an asset that should be financed (example tangible or non-tangible asset).

Tangibility

According to trade-off theory, tangible assets have a role as collateral and provide security to lenders iffirmfacesthe financial distress. Therefore, the tradeoff theory predicts a positive relationship betweenleverage and the proportion of tangible assets.

Harris and Raviv (1990) predicted that firm with higher liquidation value would have more financial leverage. Firms with more tangible assets usually have a higher liquidation values more likely to be in a mature industry, less risky, and affords higher financial leverage.Study conducted by DeAngelo and Masulis (1980) suggested an inverse correlation between tangibility and debt ratio.According to Frank and Goyal (2006), the relationship between tangibility and leverage was significantly positive in cross-sectional studies of publicly traded firms.

In Drobetz and Fix (2003), Titman and Wessels (1988), Rajan and Zingales (1995) and Fama and French (2000) argued that tangibility as measured by the ratio of fixed assets to total assets should be an important determinant for leverage and represents the effect of the collateral value of assets of the firm's gearing level. Drobetz and Fix (2003) found that tangibility was almost always had positive correlation with leverage. However, Pandey's results (2001) indicated a significant negative relationshipbetween tangibility with book and market value of shortterm debt ratios and also with the market value of longterm debt ratio while book value of longterm debt ratio was not statisticallysignificant.

In the study of Sbeiti (2010)found that there was a negative association between leverage and tangibility, and it could be explained by the condition that the firms those maintained a large proportion of fixed assets in their total assets tended to use less debt than those which

did not. This could be caused by the condition that firms with an increasing level of tangible assets might have a stable source of fundtherefore provided firms with more internally generated funds and avoided to use external financing. Çağlayan and Şak (2010) examined the relationship between tangibility and book leverage, and it was found to be negative in their study. They explained that the significant negative relationship between tangibility and leverage gave further confirmation for the agency cost theory and the existence of different interest between debt holders and shareholders.

Han-Suck Song (2005) study analyzedand investigated capital structure determinants of Swedish firms based on a panel data set from 1992 to 2000 which comprising about 6000 companies. The paper examined the determinants of total debt ratios, shortterm debt ratios, and longterm debt ratios as Swedish firms were on average very highly leveraged, and short-term debt comprised a considerable part of Swedish firms' total debt. The results indicated that most of the determinants of capital structure suggested by capital structure theories found to be relevant for Swedish firms. Gaud, Jani, Hoesli, and Bender (2003) concluded that the coefficient of the tangibility variable was significantly positive for the panel data estimations, and suggested that firms used tangible assets as collateral when negotiating borrowing, especially long term borrowing.

Financing Deficit

Financing deficit was first introduced by Shyam-Sunders and Myers (1994) and compared the peckingordertheory with trade off theory. They mentioned that the funding deficit is the insufficiency of internal cash flow of a company to realize its investment plan and meet its commitment to pay dividends to shareholders. In their study, Shyam-Sunders and Myers examined the influence of deficits on the changes in debt.

Financing deficit is also studied in Vietnam in the period 2005-2011 by Dereeper and Trinh (2015). From the results of the study found that the tradeoff theory is better able to explain the pattern of the capital structure of private companies and state enterprises in Vietnam than peckingordertheory.

Another study by Atiyet (2012) which uses variable funding deficit conducted on 88 companies that listed in the SBF 250 Index in the French Stock Exchange, and shows the results that the deficit has significant positive effect on the changes of long-term debt in the

period 1999-2005. The research finding is that the companies in France following the pattern of peckingordertheory.

Research conducted by Frank and Goyal (2003) on the funding deficit showthat the sample under test does not in linewith thepeckingordertheory. Research on funding deficit is also conducted by Utami and Inanga (2008) for companies listed in the Indonesia Stock Exchange and the LQ45 Index in period 1994-2005. From the results of the study found that internal funding deficit has a significant negative effect on the newly retained earnings and a significant positive effect on the debt and the issuance of new shares.

In formulating hypotheses, we refer to the following table that shows the theory predictions for the deficit, profitability, and tangibility on debt.

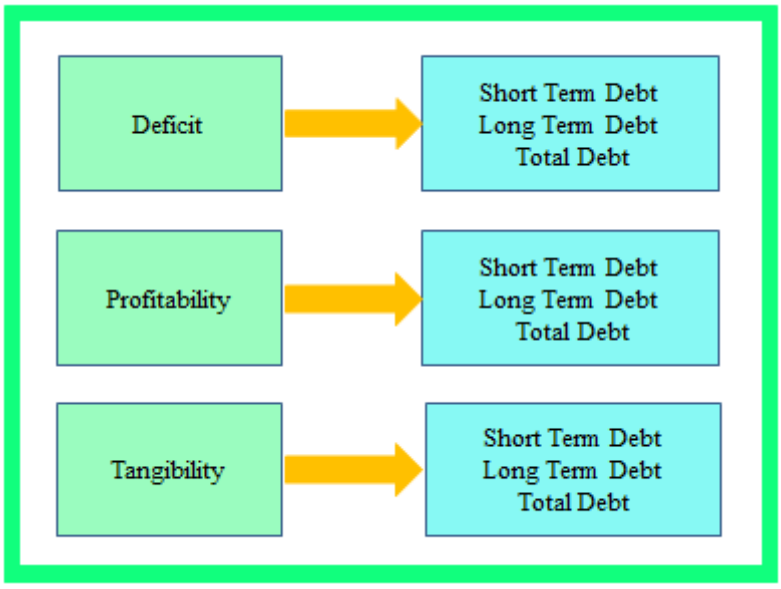
Table1 Theory Predictionfor the Deficit, Profitability, and Tangibility on Debt

Hypothesis	Variable	Pecking Order Theory	Trade-off Theory
H1	Deficit	+	+
H2	Profitability	-	+
H3	Tangibility	-	+

2.3. Conceptual Framework

Conceptual framework is a schematic research model to help us answering the research problems based on theory and relevance previous research. The following graphic is our conceptual framework.

Graphic 1 Conceptual Framework



2.4. Hypotheses

H1: Deficit has positive and significant influence on short term debt, long term debt, and total debt.

H2: Profitability has negative and significant influence on short term debt, long term debt, and total debt.

H3: Tangibility has negative and significant influence on short term debt, long term debt, and total debt.

3. RESEARCH METHODOLOGY

3.1. Variable Measurement

In this research, our independent variables consist of financing deficit, profitability, and tangibility. Operating variable both dependent variable and independent variables as well as the measurement of each variable summarized in the following table :

Table2 VariablesMeasurement

Variable	Formula	Previous Research
Short-term debt (STD)	$STD = \frac{Short\ Term\ Debt}{Total\ Aset}$	Utami and Inanga (2008)
Long-term debt (LTD)	$LTD = \frac{Long\ Term\ Debt}{Total\ Aset}$	Esch and Schevdin (2011)
Total debt (TD)	$TD = \frac{Total\ Debt}{Total\ Asset}$	Dereeper and Trinh (2015) and Moyo, *et al* (2013)
Financing Deficit (DEF)	$DEF = \frac{DIVt + CAPEXt + \Delta Wt + LTDt - Ct}{Total\ Aset}$ Where : DEFt = Internal financing deficit in period t DIVt = Dividend paymentin period t CAPEXt = *Capital Expenditure*in period t ΔWt= change in *Working Capital* LTDt= *Long Term Debt*in period t Ct= *Operating Cash Flow in* period t	Shyam-Sunders and Myers (1994)
Profitability (PRF), proxied by ROA	$ROA = \frac{Net\ Income}{Total\ Asset}$	Esch and Schevdin (2011), and Nyamita *et.al* (2015)
Tangibility (TNG)	$TANG = \frac{Fixed\ Aset}{Total\ asset}$	Moyo *et.al* (2013), Dereeper and Trinh (2015), Esch and Schevdin (2011),Utami and Inanga (2008)

3.2. Population and Sample

The population in this study are companies from manufacturing sector. The sampling period is from 2010 to 2014. The criterias used to select the sample are as follows :

Table 3 The Criteria Used To Select the Sample

No	Criteria	Screening Result (Number of Firms)
1.	Listed firms in IDX per December 2014	507
2.	Listed firms in LQ45 Index	45
3.	Firms from manufacturingsectorlistedin LQ45 Index from 2010 to 2014	16
4.	Firms from manufacturingsectorlistedin LQ45 Index for at least within 4 years period.	11
5.	Listed firms in IDX before 2009	10

Based on the above selection criteria, there are a total of 10 firms as our sample with 5 years observation period. Thus we have a total of 50 observations. The data used in the empirical models have been derived from the annual financial statement of the firms in the sample and the Indonesian Stock Exchange (IDX) Data Base. The 10 listed manufacturing firms that are included in the LQ45 Index of the IDX in this study are shown in the table below :

Table 4 Research Sample

No.	Firm	
1	ASII	PT. Astra International Tbk
2	CPIN	PT. Charoen Pokphand Indonesia Tbk
3	DOID	PT. Delta Dunia Makmur Tbk
4	GGRM	PT. Gudang Garam Tbk
5	INDF	PT. Indofood Sukses Makmur Tbk
6	INTP	PT. Indocement Tunggal Prakasa Tbk
7	KLBF	PT. Kalbe Farma Tbk
8	SMCB	PT. Holcim Indonesia Tbk
9	SMGR	PT. Semen Indonesia Tbk
10	UNVR	PT. Unilever Indonesia Tbk

3.3. Data Analysis

Data is analyzed by using multiple linear regression analysis on panel data sample of firms from the period of 2010-2014. The regression equations tested are as follows:

$$STD = \alpha + \beta1 * DEF + \beta2 * PRF + \beta3 * TNG + e \quad 1$$

$$LTD = \alpha + \beta1 * DEF + \beta2 * PRF + \beta3 * TNG + e \quad 2$$

$$TD = \alpha + \beta1 * DEF + \beta2 * PRF + \beta3 * TNG + e \quad 3$$

Where :

STD = short-term debt, LTD = long-term debt, TD = total debt, DEF = internal financing deficit, PRF = profitability, TNG = tangibility; α = intercept ; β1,β2, and β3= coefficients of regression ; ϵ = error terms.

Linear regression analysis methodshould meet the statistical requirements through classical assumption test. The requirements on the classic assumption test include: normally distributed residual value (normality test) ; no linear relationship between independent variables (test of multicollinearity) ; no correlation between the residues in period t with residue in period t-1 (test of autocorrelation) ; similarity residual variance from one observation to another observation (test of heteroscedasticity).

4. RESULTS AND ANALYSIS

4.1. Statistics Descriptive

Table 5 below shows the value of statistical description of each variable. Variable short-term debt has a minimum value of 0.08 and maximum value of 0.62. The average value of short-term debt ratio to total assets of 0.2507, which means that from each of IDR 100 the total assets of the company, the value of it which is financed by short-term debt is IDR 25.07.

Minimum and maximum values of variable long-term debt, respectively, is 0.02 and 0.76**.** The average value of long-term debt ratio to total assets is 0.1757, it means that from IDR 100 the total assets of the company, the value of it which is funded by long-term debt is IDR 17.57.

The ratio of total debt to total assets indicates the company's ability to meet the company's obligation to pay the total debt. This ratio is also commonly called the solvency ratio. Total debt minimum value is 0.13 and the maximum value is 2.08. The highest value 2.08means that the company has total debt beyond its ability to pay the obligations by its total assets.The average value of total debt to total assets in the study sample is 0.5251. This means that 52.51% of total asset is financed by debt.

Deficit to total assets indicates the condition of the company's internal financial deficits and the ability of its total assets to serve as collateral in order to raise money to finance its

deficit. The lowest deficit is 0.03 and the highest is 1.71. The average value of the deficit to total asset is 0.4539 means that the total assets of sample of companies can provide deficit protection of 45.39%.

Variable profitability is measured by net income to total assets. The average value of profitability of companies is 0.151, it means thatfrom each IDR 100 of total assets is capable to generate IDR 15.1 net income. The lowest value of profitability is -0.03 and it can be said that the company suffered a loss, while the highest value is 0.42. Both of these values can be interpreted that firm is very effective in using its assets to generate net income.

Variable asset tangibility is measured by total fixed assets to total assets. This ratio shows the proportion of the value of tangible assets that can be served as collateral by the company to raise funds. The lowest value is 0.17 and the highest value is 0.84. The average proportion of tangible assets in the research sample is 41.14%

From the table, it was found that the greatest value of the standard deviation is reached by the variable total debt and the lowest held by variable profitability.Standard deviation reflects the distribution of the data. The higher the standard deviation the wider the distribution of data or the further the data spread away from the average value of the data.

Table 5 Statistics Descriptive

Variabel	Minimum	Maximum	Mean	Std. Deviation
STD	.08	.62	.2507	.13757
LTD	.02	.76	.1757	.20314
TD	.13	2.08	.5251	.49174
DEF	.03	1.71	.4539	.34818
PRF	-.03	.42	.1510	.11388
TNG	.17	.84	.4114	.18305

4.2. Regression Classical Assumption Test

Table 6summarizesthe results of normality test. The significance value of Kolmogorov Smirnov ofthe all modelsis above 0.05 so that it can conclude that they passed the normality test.

Table 6 Kolmogorov-Smirnov Test

Model	Kolmogorov-Smirnov Value	Significance
1	0.506	0.960
2	0.648	0.796
3	1.005	0.264

Autocorrelation is examined by the value of Durbin Watson of the model. A model will pass the test of positive autocorrelationif the value of Durbin Watson (DW) is between DW>dU and pass the test ofnegative autocorrelationif 4-DW>dU. If value ofdL<DW<dU or dL<4-DW<dU, so that the data is inconclusive.

Tabel 7 summarizesthe value of DW of our models, number of observation, lower critical value (dL) and upper critical value (dU) taken from table Durbin Watson.

Table 7 Durbin Watson ofthe Models

Model	N	dL	dU	DW	4-DW
1	42	1.3573	1.6617	1.738	2.262
2	50	1.421	1.674	1.510	2.490
3	31	1.2292	1.6500	2.139	1.861

Model 1 passes the test of positive autocorrelation with DW>dU is 1.738>1.6617 and passes the test of negative autocorrelation with 4-DW>dU is 2.262>1.6617. Model 2 passes the test of negative autocorrelation as 4-DW>dU is 2.49>1,674, but has inconclusive result for positive autocorrelation test as the value of Durbin Watson lies between the value of dL and dU which is dL<DW<dU or 1,421<1,510<1,674.

To further ascertain whether the data passed the autocorrelation test or not, we apply the run test that outlined in table 8 where the model 2 passed the autocorrelation test with significance value of 0.391>0.05. Model 3 is also has no symptoms of positive autocorrelation as DW>dU or 2.139>1.6500 and also has no symptoms of negative autocorrelation as 4-DW>dU or 1.861>1.6500.

Table 8 Run Test Model 2

Unstandardized Residual	
Total Cases	50
Z	-.857
Asymp. Sig. (2-tailed)	.391

Multicollinearity test conducted by analyzing the VIF or tolerance value. If the value of VIF<10, or the value of tolerance>0.10 then the model passed the multicollinearity test. In table 9 below found that the results for all three models passed the test as all independent variables have the value of tolerance>0.10 and VIF<10.

Table 9 Results of Multicollinearity Test

Independent Variable	Model 1		Model 2		Model 3	
	Tolerance	VIF	Tolerance	VIF	Tolerance	VIF
DEF	.453	2.210	.511	1.957	.466	2.145
PRF	.569	1.756	.592	1.688	.794	1.260
TNG	.689	1.451	.758	1.320	.532	1.881

Table 10 Results of Park Test of Three Models

Independent Variable	Sig. Model 1	Sig. Model 2	Sig. Model 3
DEF	.358	.056	.373
PRF	.193	.102	.856
TNG	.994	.402	.842

Heteroscedasticity test conducted by applying park test where the independent variable regressed on the natural logarithm of the squared residuals or ln (res^2). Table 10 shows the significant value of above 0.05 and therefore data passed heteroscedasticity test. Furthermore, we conclude that all modelspassed all the test of classical assumption of regression.

4.3. Regression Analysis

Table 11 shows F-test and the coefficient of determination which indicate whether the model is appropriate in predicting the influence of independent variable on dependent variable. Table 11 below shows that the three mathematical models are fit for prediction as the F value has the significance level of less than 0.05 so that we can conclude the three models can be used to predict the effect of independent variables on the dependent variable.

From the table below it is found that three independent variables are able to explain the variable short-term debt by 56.1%, long-term debt by 78% and total debt by 25.1%. From all the values of coefficient of determination, it can be concluded that the best model is shown by the model 2 that describes the influence of the deficit, profitability, and asset tangibility on the use of long-term debt.

Table11 Coefficient of Determination and F Test Results

Dependent Variable	R Square	Adj. R Square	F	Sig.
STD	0.561	0.526	16.161	0.000
LTD	0.78	0.766	54.495	0.000
TD	0.251	0.168	3.02	0.047

From table 12we get thenew regression models as follows :

$$STD = -2.013-0.756DEF-0.304PRF+0.182TNG$$

$$LTD = 0.049 + 0.470DEF -0.292PRF -0.102TNG$$

$$TD = -2.347-0.360DEF-0.289PRF +0.435TNG$$

Pecking order theory stated that the company which faces internal financial deficit tends to prefer the use of debt compared to the issuance of new shares. Results show that there is a significant positive effect of deficit on the use of long-term debt while there is negative and significant effect of the deficit on the use of short-term debt and total debt.

Profitability is predicted to have a negative influence on debt by the pecking order theory and positive influence on debt by trade off theory. From the data processing results found that profitability had a significant negative effect on the three dependent variables with confidence level of 99% for short-term debt and total debt, and confidence level of 90% for long-term debt. This implies that the company that has higher profitability tend to use lower debt.

In line with the profitability, asset tangibility is also predicted to have a negative influence on debt by pecking order theory and positive influence on debt by trade off theory. Statistical test results shown a negative insignificant effects of tangibility of assets on long-term debt but showninsignificant positive effect on short-term debt and total debt.

Table 12 Coefficients of Regression

Variables	STD		LTD		TD	
	Unstandardized Coefficients		Unstandardized Coefficients		Unstandardized Coefficients	
	B	Sig.	B	Sig.	B	Sig.
(Constant)	-2.013	0.000	0.049	0.284	-2.347	0.000
DEF	-0.756	0.000	0.470	0.000	-0.360	0.057
PRF	-0.304	0.007	-0.292	0.075	-0.289	0.008
TNG	0.182	0.295	-0.102	0.252	0.435	0.109

From table 12 also found that the variable deficit and profitability had significant influence on the use of debt, while the variable tangibility has no significant effect on the debt. The greatest influence on debt is shown by the variable deficit. Therefore, these results can be a reference for management of a company that in using short-term debt and long-term debt

firm should take into account that these are used only if the firm faces the internal financial deficit.

These results indicate that:

a. When the company faced financial deficits, the use of short-term debt and total debt will decreasewhile long-term debt will increase.
b. Companies with higher profit will tend to have relatively low debt. From these results it can be said that a manufacturing company in Indonesia is not too take advantage on the tax shield from the use of debt.
c. Manufacturing companies that have higher asset tangibility tend to be easier to collect funding in the form of short-term debt and total debt so that the use of short-term debt and total debt increased. This is not in line with the results of the influence of tangibility of assets on long-term debt where companies with large assets will tend to have lower long-term debt.
d. The proportion in using short-term debt is more dominant than the long-term debt from the influence of the deficit, profitability and tangibility of assets, meanwhile the highest amount of using debt is caused by the deficit. Therefore, for the management of company that wants to evaluate its capital structure, can pay more attention to internal financial deficit variable in using debt.

5. CONCLUSIONS AND SUGGESTIONS

5.1. Conclusions

1. There is a significant positive effect of deficit on the use of long-term debt while there is negative and significant effect of the deficit on the use of short-term debt and total debt.
2. Profitability had a significant negative effect on the three dependent variables. This implies that the company that has good profitability tend to use lower debt.
3. Tangibility of assets has a significantly negative effects on long-term debt but not significantly positive effect on short-term debt and total debt.

5.2. Suggestions

a. For the management of company that wants to evaluate its capital structure, it can pay more attention to internal financial deficit variable in using debt. Selection of an

appropriate capital structure can increase the value of the company and reduce cost of capital.

b. For further research we can examine other variables such as the use of retained earnings, firm value, and cost of capital.

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