# **THE EFFECT OF GROWTH OPPORTUNITY, NON DEBT TAX SHIELD, ASSET STRUCTURE AND PROFITABILITY ON CAPITAL STRUCTURE** (Empirical Study on Agriculture Sector Companies Listed on the Indonesian Stock Exchange Period 2016-2019) Muhammad Irsyal Kamil<sup>1</sup>, Krisnando<sup>2</sup>

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**Abstract** - This study aims to determine the effect of Growth Opportunity, Non Debt Tax Shield, Asset Structure, and Profitability on Capital Structure in Agricultural Sector Companies Listed on the Indonesia Stock Exchange (BEI) 2016-2019 Period. This study uses a causal research strategy with a quantitative approach, which is measured using a panel data regression-based method with the help of Eviews 10 Software . The population of this study is the Agricultural Sector Companies Listed on the Indonesia Stock Exchange for the period 2016-2019. The sample was determined based on the purposive sampling method with a total sample of 9 companies so that the total observations in this study were 36 observation data. The data used in this study are secondary data. The data collection technique uses the documentation method through the official IDX website : <u>www.idx.co.id</u> and hypothesis testing uses the t test and the F test (simultaneously). The results of the study prove that partially Growth Opportunity has a positive and significant effect on Capital Structure, Non Debt Tax Shield has no effect on Capital Structure, Asset Structure has no effect on Capital Structure, Profitability has a negative and significant effect on Capital Structure, and Growth Opportunity, Non Debt Tax Shield , Asset Structure, and Profitability simultaneously affect the Capital Structure.

**Keywords :** Capital Structure, Growth Opportunity, Non Debt Tax Shield, Asset Structure, and Profitability.

# 1. INTRODUCTION

The current globalization era is experiencing very rapid growth every year, coupled with the increasingly widespread free competition market, which triggers the level of competition to be heavier. There are several sub-sectors, including the food crop sub-sector which can also be called horticulture, the plantation sub-sector, the livestock sub-sector, the fisheries sub-sector, the forestry sub-sector, and other sub-sectors.

PT. Bakrie Sumatera Plantations recorded a net loss of Rp 90, 24 billion in 2016. In fact, in the long period of the previous year the company still scored a net loss of Rp 406.214 billion. The recorded performance loss was due to the company's operating expenses which rose to Rp 98.052 billion in 2016.

PT. Astra Agro Lestari Tbk also decreased the production of fresh fruit empire by 7, 5%. This decline occurred in the Kalimantan, Sumatra and Sulawesi regions. This incident has caused an increase in the cost of borrowing and loss on foreign exchange with an increase in the company's debt, and the company's net profit has decreased to IDR 619, 11 billion in 2016.

Companies typically require no small cost, ie the cost of which is derived from the fund's internal and external funds. Internal funding is funds that come from company owners in the form of retained earnings and depreciation from operational activities. Meanwhile, external funding is funding that comes from outside the company, namely creditors, investors, and debt securities holders (Mustafa, 2017: 6).

The capital structure describes the form of the company's financial proportion, namely between its own capital which is a source of financing for a company and its own capital that comes from long-term debt. According to Fahmi (2015: 184), capital structure needs to be carried out effectively and efficiently in order to improve the welfare of owners and shareholders.

The role of capital structure is very important, because when the company's capital structure experiences an *error it* can cause capital costs for the company which will cause the company to be inefficient (Stella, 2015). The company must have the right funding, where there is a need for a manager to determine the optimal capital structure. The optimal capital structure is obtained when the *cost of capital is* at a minimum and maximizes dividends to shareholders (*shareholders*).

Based on the above background, further research is needed to determine the effect of the influence of *Growth Opportunity*, *Non Debt Tax Shield*, Asset Structure, and Profitability on Capital Structure.

# II. LITERATURE REVIEW

#### 2.1. Review of Previous Research Results

Nuzula (2016) shows that growth opportunity has a negative effect on capital structure. This is because the company has a high growth opportunity that reduces the cost of financing its equity. The reduction in the cost of equity financing makes the company more use its internal funds to finance its growth. The research was conducted at *Property* and *Real Estate* Sector Companies Listed on the Indonesia Stock Exchange in 2009-2014. The research method used with a quantitative approach and sampling with *purposive sampling* with the help of SPSS software.

Suherman, Khodijah, and Ahmad, (2017) shows that the *non debt tax shield* has a negative and significant effect on capital structure. This is because *non-debt tax shield* high will reduce the company's debt. If the *non-debt tax shield* decreases, the company will use a large debt. The results of this study are supported by the *Trade-off Theory* that the higher the debt, the company will get protection from debt interest expenses which can reduce tax profit. This research was conducted at Consumer Goods Sector Companies Listed on the Indonesia Stock Exchange 2009-2013 period. The sample used was 32 companies. The research method used is quantitative with secondary data collection. This study uses panel data regression.

Abbasi and Delghandi (2016) suggest that profitability affects the capital structure. Therefore profitability has an important role in a company. Companies that have a lower amount of debt will benefit a company compared to companies that get a higher amount of debt, so they are used as internal company financing. The research was conducted at Iranian companies listed on the Tehran Stock Exchange for the period of 2005 to 2014. The research methodology used is the OLS regression model to determine the effect of the influence of the independent variable on the dependent variable.

# 2.2. Theoritical Basic

# 2.2.1. Capital Structure

Fahmi (2017:179) defines that the capital structure is a form of the company's *financial* proportion, namely the capital that comes from long-term debt (*long term liabilities*) and its own capital. Sudana (2015: 164) states that the *capital structure* is a company's long-term spending as measured by a comparison of long-term debt with its own capital.

In order for the company's *financial* stability to be guaranteed, the capital structure must be regulated, because there is no definite measure of the amount of capital of each company. Basically, the capital structure must be oriented in order to achieve *financial* stability and company survival.

# 2.2.1.1. Capital Structure Components

In general, the capital structure consists of own capital and foreign capital (Riyanto, 2011: 238). The following is an explanation of the components of the capital structure:

a. **Foreign capital**, is capital that comes from outside the company that is temporary in nature, and is a debt for the company, which when maturity must be paid back.

b. **Own capital** (*Shareholder's Equity*), is capital that comes from the owner of the company and who is invested in the company for an indefinite period). Own capital comes from internal and external sources. Internal funds are obtained from the profits earned by the company. Meanwhile, external funds are obtained from company capital.

# 2.2.1.2. Factors Affecting Capital Structure

Sartono (2012: 248) argues that capital structure decisions are influenced by several factors, including the following:

- **1.** The growth rate, the faster the company's growth will result in higher funding requirements for development financing.
- **2.** Asset structure, a company with a large amount of fixed assets will use a large amount of debt, this is because large companies have easier access to sources of funds than small companies.
- **3.** The level of sales, the company's sales are relatively stable, meaning that the company has a stable cash flow as well, so it will use higher debt than unstable sales.
- **4.** Profit and tax protection, this variable is closely related to sales stability. If the company's profit variability is small, the company's ability to bear the fixed burden of debt will be even greater.
- 5. Company scale, large, established companies will find it easier to get capital in the capital market than small companies.
- **6.** Profitability, the most important factor in determining the capital structure. If retained earnings are high, companies prefer to use retained earnings over debt.

# 2.2.2. Growth Opportunity

Hartono (2013) suggests that growth opportunity is an addition to the annual growth rate of total assets. Growth opportunity can be used as a reference in determining how far the company's growth rate is in the future.

If the company gets a high level of growth opportunity, the funding needs will increase and the company will tend to use its shares to fund the company's operations. On the other hand, if the growth opportunity *is* low, the company will share this risk with creditors by issuing long-term debt.

#### 2.2.3. Non Debt Tax Shield

Suripto (2015: 8) states that the non-debt tax shield is a tax protection that provides a strong incentive for debt, especially for companies that have a large enough taxable income. The tax benefit from debt decreases when another tax deduction, such as depreciation increases.

Thus, the non debt tax shield is an expense that comes from tax advantages other than debt, namely depreciation and amortization. So, companies that have high NDTS rates will use their low debt levels, this is because the cash flow becomes the company's capital to run their business.

#### 2.2.4. Asset Structure

Asset structure consists of current assets and fixed assets. Current assets are assets that run out in one turn in the production process and the turnaround process is short-term (less than 1 year). Meanwhile, fixed assets are durable assets that run out gradually in the production process (Riyanto, 2011: 19).

Thus, the asset structure has a very important role in determining company financing. Because in general, companies have two types of assets, namely, current assets and fixed assets. Where companies that have higher fixed assets, the company will prioritize their funding needs with their own capital, and vice versa if the current assets of the company are high, it will prioritize fulfilling their funding needs with debt.

#### 2.2.5. Profitability

Kasmir (2016: 114) argues that profitability is a ratio to assess the company's ability to seek profit or profit in a certain period, and this ratio also provides a measure of the effectiveness of company management as indicated by the profits obtained from sales.

If the company wants to get the maximum profit as targeted, then as much as possible the company will make improvements to the quality of its products and make new investments. Thus, companies are required to meet the targets they want. Therefore, it can be said that the company's profitability is good and is able to meet the profit target set by using its assets or capital (Kasmir, 2016: 114).

# 2.2.5.1. Profitability Ratio Objective

Therefore, the goals of profitability for the company and outside the company according to (Kasmir, 2016: 197) are as follows:

- 1. To measure or calculate the profit earned by the company in a certain period
- 2. To assess the company's profit position from the previous year to the current year
- 3. To assess the development of profit over time
- 4. To assess the amount of net profit after tax with own capital
- 5. To measure the productivity of all company funds used both loan capital and own capital

#### 2.2.5.2. Types of Profitability

There are several types of profitability ratios according to (Kasmir, 2016: 198) :

- 1. Profit Margin on Sales or Profit Margin Ratio is a ratio used to measure the profit margin on sales.
- 2. Return on Investment (ROI results) is a ratio showing the results on the amount of assets used in a per usahaan.
- 3. Return on Equity is a ratio that measures net profit after tax with your own capital. This ratio shows the efficient use of own capital.
- 4. Earning per Share of Common Stock is a ratio to measure the success of management in achieving benefits for shareholders.

#### 2.2.6. Relationship Between Research Variables

# 2.2.6.1. The Effet of Growth Opportunity on Capital Structure

Growth opportunity occurs when a company experiences a fast growth rate so that it experiences a huge impact on its funding needs (Brigham and Houston 2012: 189). Companies that have high growth are more likely to use debt than those with low growth. With a high level of company growth, the value of the company's debt will decrease, because the company has more internal funds than external funds. This theory is supported by research conducted by Fachri, and Adiyanto, (2019), Fitriany, and Nuraini, (2016) and Ariani and Wiagustini (2017) which state that growth opportunity has a positive effect on capital structure. So, the temporary answer is that growth opportunity has a positive effect on capital structure.

#### 2.2.6.2. The Effect of Non Debt Tax Shield on Capital Structure

According to Suripto (2015: 8) non debt tax shield is a tax protection that provides a strong incentive for debt, especially for companies that have a large enough taxable income. With a high

NDTS rate, the company will use its low debt. This is because the cash flow that becomes the company's capital will be used to run the business. If, the amount of assets owned by the company, the depreciation expense will increase. This theory is supported by research conducted by Wulandari, and Artini, (2019) and Miraza, and Muniruddin, (2017) suggesting that the non debt tax shield has a positive effect on capital structure. So, the temporary answer is that the non debt tax shield has a positive effect on the capital structure.

# 2.2.6.3. The Effect of Asset Structure on Capital Structure

Asset structure is a comparison both in absolute terms (comparison in nominal terms) and in relative terms (comparison in percentage terms), according to Riyanto, (2011). Asset structure has two components, namely fixed assets and current assets. This theory is supported by research conducted by Indra, Hidayat, and Azizah (2017) and Tijow, Sabijono, & Tirayoh, (2018) suggesting that asset structure has a positive effect on capital structure. So, the temporary answer is that asset structure has a positive effect on capital structure.

# 2.2.6.4. The Effect of Profitability on Capital Structure

Profitability is the ratio used to assess the ability of companies to make a profit, also can give a measure of the level of effectiveness of the management of an enterprise (Kasmir 2016: 196). The profitability ratio used is return on equity (ROE). Return on equity (ROE) is a ratio that shows the efficiency of using one's own capital (Kasmir, 2016: 204). The level of ROE shows that the company has good financial resources. This theory is supported by research conducted by Dawud, and Hidayat, (2019), Batubara, Topowijono and Zahroh (2017) and Fitriany and Nuraini (2016) suggesting that profitability has a negative effect on capital structure. Thus, the provisional answer is that profitability has a negative effect on capital structure.

# 2.2.6.5. The Effect of Growth Opportunity, Non Debt Tax Shield, Asset Structure, and Profitability on Capital Structure

The importance of good management on the ratio of growth opportunity, non debt tax shield, asset structure, and profitability has a major effect on capital structure. Research conducted by Prasetya and Asandimitra (2014) states that profitability, company size, growth opportunity, asset structure, and non-debt tax shield simultaneously affect capital structure. Based on the above research, the temporary answer is growth opportunity, non debt tax shield, asset structure, and profitability simultaneously affect the capital structure.

#### 2.3. Research Conceptual Framework

Based on the predetermined title "The Effect of Growth Opportunity, Non Debt Tax Shield, Asset Structure, and Profitability on Capital Structure in Agricultural Sector Companies Listed on the Indonesia Stock Exchange for the 2016-2019 Period", it can be described as follows:



#### Figure 2. 1. Research Conceptual Framework

# III. RESEARCH METHODS

#### 3.1. Research Strategy

The strategy used in this research is causal research. Causal research is used to determine the causal relationship with one of the independent variables which can affect the dependent variable, according to Sugiyono (2017: 21).

This type of research used in this research is a quantitative approach. Sugiyono (2017: 8) states that the quantitative approach is a method based on the philosophy of *positivism*, used to research on certain populations and samples, data collection using research instruments, quantitative or statistical data analysis with the intention of testing predetermined hypotheses.

#### **3.2.** Population and Sample

Sugiyono (2017: 80) defines the research population as the entire area of the object and research subject to be analyzed and then drawn conclusions by the researcher. The population in this study were 25 agricultural sector companies listed on the Indonesia Stock Exchange during the 2016-2019 period which were obtained by researchers from *the* official *website* of the Indonesia Stock Exchange (<u>www.idx.co.id</u>) and *the* official *website* of each company.

According to Sugiyono (2017: 80) the research sample is part of the number and characteristics of the population. The sample taken from this population must be truly representative. The data used in this research is secondary data, where the sampling technique is *purposive sampling method*, meaning that the sampling technique is with certain considerations (Sugiyono, 2017: 84).

The criteria for the companies sampled in this study are as follows: 1) Agricultural sector companies listed on the Indonesia Stock Exchange (BEI) during the 2016-2019 period. 2) Companies that present complete financial statement data for the 2016-2019 period related to research variables. 3) Companies that have profits during the 2016-2019 period.

#### 3.3. Hypothesis Testing Methods

Panel data is a combination of time series data and cross data (Basuki and Prawoto, 2017: 275). Data time series is data that consists of one or more variables to be observed in an observation unit within a certain time. Meanwhile, cross section data is observation data which consists of several observation units at one point in time. This study uses time series data for 4 years, namely 2016-2019, while the cross section data is 9 agricultural sector companies that were sampled in this study.

Panel data regression models are used to determine the relationship between growth opportunity, non det tax shield, asset structure, and profitability with capital structure. Thus, the panel data regression model equation can be described as follows:

$$Y = \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \epsilon_{it}$$

Keterangan :

Y = Profitability of Capital Structure (DER)

 $\alpha$  = Constant

 $\beta_1$ -  $\beta_4$  = Regression Coefficient

- $X_1$  = Growth Opportunity
- $X_2$  = Non Debt Tax Shield

- $X_3$ = Asset Structure
- = Profitability  $X_4$
- = Error 3

# IV. RESULTS AND DISCUSSION

# 4.1. Data Analysis

# **4.1.1. Descriptive Statistics**

Descriptive statistical analysis is used to provide an overview of the variables studied, namely growth opportunity  $(X_1)$ , non debt tax shield  $(X_2)$ , asset structure  $(X_3)$ , and profitability  $(X_4)$  and the dependent variable is the capital structure which is proxied by Debt Equity Ratio.

Table 4.1. Descriptive Statistics					
	Growth Opporuntity	Non Debt Tax Shield	Asset Structure	Profitability	Capital Structure
Minimum	-0.052	0.0091	0.0215	0.003	0.1709
Maximum	0.4082	0.5253	0.8458	0.2549	2.6826
Mean	0.088081	0.200114	0.624525	0.104236	1.179778
Std.Deviasi	0.100789	0.120504	0.220499	0.07107	0.773588
Observations	36	\$ 36	36	36	36

Table 4.1. Descriptive Stat	tistics	
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Source: Output Eviews versi 10.0

The results of the first independent variable analysis, namely growth opportunity, show that the minimum value is -0.052 owned by PT. Sinar Mas Agro Resources and Technology Tbk in 2019. While the maximum value is 0.4082 owned by PT. Dharma Satya Nusantara Tbk in 2018. Rated mean (average) of variable growth opportunity for 0.088081. The standard deviation value is greater than the mean (average) value of 0,100789, meaning that the distribution of data for the growth opportunity variable is not good and has a high variation of data between one data and another.

The results of the second independent variable analysis, namely the non debt tax shield, show that the minimum value is 0.0091 which is owned by PT. Bisi International Tbk in 2018. While the maximum value is 0.5253 owned by PT. Dharma Samudera Fishing Industries Tbk in 2016. Rated mean (average) of variable non-debt tax shield of 0.200114. The standard deviation value is smaller than the mean (average) value of 0.120504, meaning that the data distribution for the non debt tax shield variable is good and has a data variation that is not too high between one data and another.

The result of the analysis of the third independent variable, namely the asset structure, shows that the minimum value is 0.0215 which is owned by PT. Bisi International Tbk in 2018. While the maximum value is 0.8458 owned by PT. Sampoerna Agro Tbk in 2019. The mean (average) value of the asset structure variable is 0.624525. The standard deviation value is smaller than the mean (average) value of 0.220499, meaning that the data distribution for the asset structure variable is good and has data variations that are not too high between one data and another.

The results of the fourth independent variable analysis, namely profitability, show that the minimum value of 0.003 is owned by PT. Sawit Sumbermas Sarana Tbk in 2019. While the maximum value is 0.2549 owned by PT. Sinar Mas Agro Resources and Technology Tbk in 2016. The mean (average) value of the asset structure variable is 0.104236. The standard deviation value is smaller than the mean (average) value of 0.07107, meaning that the distribution of data for the profitability variable is good and has data variations that are not too high between one data and another.

The results of the analysis of the dependent variable, namely capital structure, show that the minimum value is 0.1709 PT. Bisi International Tbk in 2016. While the maximum value is 2.6826 owned by PT. Tunas Baru Lampung Tbk in 2016. The mean (average) value of the capital structure variable is 1.179778. The standard deviation value is smaller than the mean (average) value of 0.773588, the data distribution for the capital structure variable is good and has a data variation that is not too high between one data and another.

# 4.1.2. Classic Assumption

#### 4.1.2.1. Normality Tests

Tests using methods histogram graph and test Jarque Bera with history normality test. The significance frame is 5%, then the hypothesis is as follows:

1. If the probability value > 0.05, the data is normally distributed.

2. If the probability value < 0.05 then the data are not normally distributed .



# Figure 4. 1. Data Normality Tests

Based on graphic images 4.1. The data normality test shows that the histogram graph and the *Jarque Bera* statistical test can be seen a probability value of 0.418540, where the probability result is greater than 0.05, namely 0.418540> 0.05, it can be concluded that the data is normally distributed.

#### 4.1.2.2. Multicollinearity Tests

The multicollinearity test aims to test whether in a regression model there is a high or perfect correlation between the independent variables (Ghozali and Ratmono, 2017). If there is no correlation between the independent variables, the regression model is said to be good. The decision making criteria can be indicated by:

- 1. If the correlation value > 0.80 means that there is a multicollinearity problem .
- 2. If the correlation value < 0.80 means there is no multicollinearity problem .

#### Table 4. 2. Multicollinearity Tests

	GO	NDTS	SA	Profitability
GO	1	-0.2091599799725664	-0.1073089227752418	0.3087590157376683
NDTS	-0.2091599799725664	1	0.02933334326832286	-0.5217125023691969
SA	-0.1073089227752418	0.02933334326832286	1	-0.2409858791886526
Profitability	0.3087590157376683	-0.5217125023691969	-0.2409858791886526	1

Source: Output Eviews versi 10.0

Based on Table 4.2. It can be seen that the independent variables consisting of growth opportunity, non debt tax shield, asset structure, and profitability from the multicollinearity test are caused by having a correlation value below 0.80 (correlation value <0.80), which is as follows:

- 1. Growth Opportunity to Non Debt Tax Shield and vice versa has a correlation value of 0.2091599799725664.
- 2. Growth Opportunity to Asset Structure and vice versa has a correlation value of 0.1073089227752418.
- 3. Growth Opporunity on profitability and vice versa has a correlation value of 0.3087590157376683.
- 4. Non Debt Tax Shield on Asset Structure and vice versa has a correlation value of 0.02933334326832286.
- 5. Non Debt Tax Shield on Profitability and vice versa has a correlation value of 0.5217125023691969.
- 6. Asset Structure on Profitability and should have a correlation value of 0.2409858791886526

#### 4.1.2.3. Heteroscedasticity Tests

The Heteroscedasticity test is used to test whether in a regression model there is an inequality of variance from the residuals from one observation to another (Ghozalidan Ratmono, 2017). If the variance of the observed results is constant, it is called homoscedasticity and if the variance is different it is called heteroscedasticity. Heteroscedasticity does not occur in good regression models. The test is performed using the *absolute residual* value of the independent variable. There are decision-making criteria in this test, which are as follows:

1. If the probability value *Obs* \* *R-Squared* <0.05 means that there is a heteroscedasticity problem.

2. If the probability value Obs \* R-Squared > 0.05 means that there is no heteroscedasticity problem.

Heteroskedasticity Test: Gletsjer				
F-statistic	1.097.619	Prob. F(4,31)	0.3751	
Obs*R-squared	4.466.091	Prob. Chi-Square(4)	0.3466	
Scaled explained SS	3.032.082	Prob. Chi-Square(4)	0.5525	

Tabel 4.	3. He	terosced	lasticity	Tests
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Source: Output Eviews versi 10.0

Based on Table 4.3. It can be seen that the *Chi-Square* probability value has a value of 0.3466, namely the *p*-value is greater than 0.05 (0.3466 > 0.05), so it can be concluded that there is no heteroscedasticity problem.

#### 4.1.2.4. Autocorrelation Tests

The autocorrelation test aims to test whether or not there is a correlation between the disturbing period error in period t and the disturbing period error in period t-1 (previous period)

(Ghozali dan Ratmono, 2017). This regression model is said to be good if it is able to show that there is no indication of autocorrelation. The significance level is 5%, then the decision-making criteria are as follows:

- 1. If the probability value of chi square > 0.05 means that there is no autocorrelation .
- 2. If the probability value of chi square <0. 05 means that there is autocorrelation.

 Tabel 4. 4. Autocorrelation Tests

Breusch-Godfrey Serial Correlation LM Test:				
F-statistic	1.366.958	Prob. F(2,29)	0.2581	
Obs*R-squared	1.746.937	Prob. Chi- Square(2)	0.2422	

Source: Output Eviews versi 10.0

Based on test results using Breusch-Godfrey LM Test are presented in Table 4. 4. shows that the Chi-Square probability value has a value of 0.2422, namely the p-value is greater than 0.05 (0.2422 > 0.05), so it can be concluded that the data in the study are free from autocorrelation or in this regression model there is no correlation between the confounding error in period t with confounding period t-1 (previous).

#### 4.1.3. Panel Data Regression Estimation Model

Panel data regression analysis is used to determine how far the influence of growth opportunity, non debt tax shield, asset structure, and profitability on capital structure in agricultural sector companies listed on the Indonesia Stock Exchange (BEI) for the period 2016-2019. The author uses Eviews 10 data processing with panel data regression method which consists of three models, including:

#### 4.1.3.1. Common Effect Model (CEM)

Common Effect Model is m etode which combines the data time series and cross section which will be regressed in the method of ordinary least squares (OLS).

#### Table 4. 5. Results of Panel Data Regression Common Effect Model

Dependent Variable: STRUKTUR\_MODAL Method: Panel Least Squares Date: 08/29/20 Time: 17:59 Sample: 2016 2019 Periods included: 4 Cross-sections included: 9 Total panel (balanced) observations: 36

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GO	0.296645	0.146002	2.031783	0.0508
NDTS	-0.119408	0.298751	-0.399691	0.6921
SA	0.597372	0.279843	2.134669	0.0408
PROFITABILITAS	-0.088880	0.161859	-0.549122	0.5869
С	0.258019	0.336474	0.766830	0.4490
R-squared	0.237036	Mean dependent var		-0.068457
Adjusted R-squared	0.138589	S.D. dependent var		0.399935

S.E. of regression Sum squared resid	0.371189 4.271208	Akaike info criterion Schwarz criterion	0.984033 1.203966
Log likelihood	-12.71259	Hannan-Quinn criter.	1.060795
F-statistic Prob(F-statistic)	2.407757 0.070551	Durbin-Watson stat	0.400897

Source: Output Eviews versi 10.0

Based on the regression results using the Common Effect Model (CEM), it shows that the constant value is 0.258019 with a probability value of 0.4490. The results of the regression equation CEM has an adjusted R<sup>2</sup> of 0.138589 which indicates that the variant growth opportunity, non-debt tax shield, the asset structure and profitability of 13.8589%. The remaining 86.1411% is influenced by other variables not examined in this study.

#### 4.1.3.2. Fixed Effect Model (FEM)

The Fixed Effect Model (FEM) assumes that the coefficient ( slope ) is constant but the intercept varies between individuals. Although different intercept, but it does not change over time (time variant), but the coefficient ( slope ) in each independent variable equal to each company as well as over time.



Dependent Variable: STRUKTUR_MOD Method: Panel Least Squares Date: 08/29/20 Time: 18:00 Sample: 2016 2019 Periods included: 4 Cross-sections included: 9 Total panel (balanced) observations: 36	DAL		ER ER	
Variable	Coefficient	Std. Error	t-Statistic	Prob.
GO NDTS SA PROFITABILITAS C	0.055804 -0.073361 0.070693 -0.103640 0.156197 Effects Specifi	0.020821 0.125041 0.130940 0.028318 0.093267	2.680128 -0.586697 0.539889 -3.659900 -1.674725	0.0134 0.5631 0.5945 0.0013 0.1075
Cross-section fixed (dummy variables)				
R-squared Adjusted R-squared S.E. of regression Sum squared resid Log likelihood F-statistic Prob(F-statistic)	0.990727 0.985888 0.047509 0.051914 66.66857 204.7684 0.000000	Mean dependent var S.D. dependent var Akaike info criterion Schwarz criterion Hannan-Quinn criter. Durbin-Watson stat		-0.068457 0.399935 -2.981587 -2.409761 -2.782004 1.511588

Source: Output Eviews versi 10.0

Based on the regression results using the *Fixed Effect Model* (FEM), it shows that the constant value is 0.156197 with a probability value of 0.1075. The results of FEM regression equation has *an adjusted* R<sup>2</sup> of 0.985888 which indicates that the variant growth opportunity, non-

*debt tax shield*, the asset structure and profitability of 98.5888%. The remaining 14.112% is influenced by other variables not examined in this study.

#### 4.1.3.3. Random Effect Model (REM)

The Random Effect Model is used to find out which interference variables may be interrelated between time and between individuals, according to (Widarjono, 2015: 359). In this model, the specific effect of each individual is treated as a part of the error component which is random and uncorrelated with the observed explanatory variables.

 Table 4. 7. Results of Panel Data Regression Random Effect Model

 Dependent Variable: STRUKTUR\_MODAL

 Method: Panel EGLS (Cross-section random effects)

 Date: 08/29/20
 Time: 18:01

 Sample: 2016 2019

 Periods included: 4

 Cross-sections included: 9

 Total panel (balanced) observations: 36

 Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GO NDTS SA PROFITABILITAS C	0.056832 -0.089179 0.094853 -0.105784 0.163314	0.020801 0.121292 0.126721 0.028025 0.143657	2.732183 -0.735242 0.748522 -3.774594 -1.136836	0.0103 0.4677 0.4598 0.0007 0.2643
	Effects Sp	ecification	S.D.	Rho
Cross-section random Idiosyncratic random	ROL		0.333395 0.047509	0.9801 0.0199
R-squared Adjusted R-squared S.E. of regression F-statistic Prob(F-statistic)	Weighted 0.374335 0.293604 0.050268 4.636813 0.004742	Mean dependent var S.D. dependent var Sum squared resid Durbin-Watson stat		-0.004865 0.059810 0.078334 1.992923
	Unweighte	d Statistics		
R-squared Sum squared resid	0.060142 5.261496	Mean dependent var Durbin-Watson stat		-0.068457 0.014783

Source: Output Eviews versi 10.0

Based on the regression results using the Fixed Effect Model (FEM), it shows that the constant value is 0.163314 with a probability value of 0.2643. The results of FEM regression equation has an adjusted R<sup>2</sup> of 0.293604 which indicates that the variant growth opportunity, non-debt tax shield, the asset structure and profitability of 29.3604%. The remaining 70.6396% is influenced by other variables not examined in this study.

# 4.1.4. Panel Data Regression Model Selection Test

Based on the three panel data regression estimation models, they are Common Effect Mode (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). So in choosing the best model, it is necessary to test the panel data regression estimation model with the Chow test, the Hausman test, and the lagrange multiplier test as follows:

# 4.1.4.1. Chow Tests

The chow test is used in determining the choice between the common effect and fixed effect approach model which has the following criteria:

- 1. If the probability value ( P-Value ) for cross section  $F \ge 0.05$  (significance value) then H 0 is accepted, meaning that the most appropriate model to use is the Common Effect Model (CEM).
- 2. If the probability value (P-Value) for cross section  $F \le 0.05$  (significance value) then H 0 is rejected, meaning that the most appropriate model to use is the Fixed Effect Model (FEM).

The hypothesis that will be used in testing are:

- H 0 :  $\beta = 0$  (then using the Common Effect Model)
- H 1 :  $\beta \neq 0$  (then using the Fixed Effect Model)

# **Table 4.8. Results Using Model Chow Test**

		66 Mm		
Redundant Fixed Ef	fects Tests			
Equation: Untitled		P Z N		
Test cross-section fi	xed effects	El.		
Effects Test		Statistic	d.f.	Prob.
Cross-section F	0	233.664857	(8,23)	0.0000
Cross-section Chi-se	quare	158.762306	8	0.0000
	10.0		2	

Source: Output Eviews versi 10.0

Based on the test results table 4:10. In the results of the chow, common effect, and fixed effect tests, the probability value (P-value) for cross section F is  $0.0000 \le 0.05$ , so it can be concluded that  $H_0$  rejected and  $H_1$  accepted. So that the model that can be selected through the chow test is the Fixed Effect Model (FEM).

# 4.1.4.2. Hausman Test

Hausman Test aims to determine whether the model used is the Fixed Effect Model (FEM) or the Random Effect Model (REM). Then from the test results, it can be seen whether FEM can be better than REM. This test follows the chi square distribution of degrees of freedom (k = 4) with the following criteria:

- 1. If the probability value (P-Value) for the cross section  $F \ge 0.05$  (significance value) then  $H_0$  accepted, meaning that the most appropriate model to use is the Random Effect Model (REM).
- 2. If the probability value (P-Value) for cross section  $F \le 0.05$  (significance value) then  $H_0$  rejected, meaning that the most appropriate model to use is the Fixed Effect Model (FEM).

The hypothesis used in testing is:

- 1.  $H_0: \beta = 0$  (then using the Random Effect Model )
- 2.  $H_1: \beta \neq 0$  (then using the Fixed Effect Model )

#### Table 4.9. Results Using Model Hausman Test

Correlated Random Effects - Hausman Test Equation: Untitled Test cross-section random effects

	st Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random 7.705210 4 0.1	oss-section random	7.705210	4	0.1030

Source: Output Eviews versi 10.0

Based on the test results table 4.9. In the results of the Hausman test, random effects, and fixed effects above, the probability value (P- value) for the random cross section is  $0.1030 \ge 0.05$ , so the hypothesis  $H_0$  is accepted and  $H_1$  is rejected. So that the model that can be selected through the Hausman test is the Random Effect Model (REM).

#### 4.1.4.3. Langrange Multiplier Test

Langrange Multiplier Test is used to test data analysis with random effect or common effect (OLS) is more appropriate for use with the software Eviews 10. The Random Effect Model raised by Breusch-food was used to test the significance based on the residual value of the OLS method. The decision making criteria carried out by the Langrange Multiplier Test are :

- 1. If the value of the Breusch-food cross section is  $\geq 0.05$  (significance value) then H<sub>0</sub> is accepted, meaning that the most appropriate model to use is the Common Effect Model (CEM).
- 2. If the Breusch-food cross section value  $\leq 0.05$  (significance value) then H<sub>0</sub> is rejected, meaning that the most appropriate model to use is the Random Effect Model (REM).

The hypothesis used in testing is:

 $H_0: \beta = 0$  (then using the Common Effect Model )

 $H_1$ :  $\beta \neq 0$  (then using the Random Effect Model)

#### Table 4. 10. Model Test Results Using The Lagrange Multiplier Test

Lagrange Multipli	er Tests for Random Effects	
Null hypotheses:	No effects	

Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided

	Cross-section	Test Hypothesis Time	Both
Breusch-Pagan	36.22199	1.533445	37.75544
Source: Output Eview	<b>(0.0000)</b> vs versi 10.0	(0.2156)	(0.0000)

Based on the test results 4.10. In the results of the lagrange multiplier, common effect and random effect test above, the value for the Breusch-pagan cross section is  $0.0000 \le 0.05$ , so it can be concluded that  $H_0$  is rejected and  $H_1$  is accepted. So that the model that can be selected through the lagrange multiplier test is the Random Effect Model (REM).

#### 4.1.5. Conclusion of Model Selection

Based on the results of the tests that have been carried out consisting of the chow test, the hausman test, and the lagrange multiplier test:

No.	Metode	Pengujian	Hasil
1.	Uji Chow	CEM dan FEM	Fixed Effect Model
2.	Uji Hausman	REM dan FEM	Random Effect Model
3.	Uji Lagrange Multipier	REM dan CEM	Random Effect Model

Table 4.11. Test Conclusion Results

Based on the results of panel data regression testing of the three panel data models above, which has the aim to strengthen the conclusions of the panel data regression estimation method used, then 1 from the conclusion that is used in this study is the *Random Effect Model* to analyze further data in this study.

#### 4.1.6. Panel Data Regression Analysis

Panel data regression analysis has a function that is to test the extent to which 1 variable independent variable has an effect on 1 dependent variable where there are several companies in a period of time. The independent variable in this study is the Growth Opportunity, Non-Debt Tax Shield, asset structure and profitability, while 1 ariable dependent in this study is the Capital Structure.

#### Table 4.12. Results of Panel Data Regression Analysis

Dependent Variable: STRUKTUR\_MODAL Method: Panel EGLS (Cross-section random effects) Date: 08/29/20 Time: 18:01 Sample: 2016 2019 Periods included: 4 Cross-sections included: 9 Total panel (balanced) observations: 36 Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GROWTH_OPPORTUN	IITY 0.056832	0.020801	2.732183	0.0103
NON_DEBT_TAX_SHIE	ELD -0.089179	0.121292	-0.735242	0.4677
STRUKTUR_ASSET	0.094853	0.126721	0.748522	0.4598
PROFITABILITAS	-0.105784	0.028025	-3.774594	0.0007
С	0.163314	0.143657	-1.136836	0.2643
Source: Output Eviews	versi 10.0 🚺 🗍 🌔	ESIA		

Based on the regression test results equation above, it can be described as follows: DER = 0.163314 + 0.056832 Growth Opportunity – 0.089179 Non Debt Tax Shield +

0.094853 Asset Structure - 0.105784 Profitability + e

- 1. The constant value is 0.163314 which means that in the absence of the influence of growth opportunity, non debt tax shield, asset structure, and profitability, the capital structure will be 0.163314 or in other words if 1 independent variable is considered constant (value = 0) then the capital structure value has a value of 0.163314.
- 2. The growth opportunity variable has a value of 0.056832 with a positive coefficient, so the results illustrate that every increase in one growth opportunity unit with the assumption that the value of 1 other ariable is constant (constant), there will be an increase in the capital structure of 0.056832.
- 3. The non debt tax shield variable has a value of -0.089179 with a coefficient of 1 variable, so the results illustrate that every increase in one unit of non debt tax shield assuming 1 other variable remains (constant), there will be a decrease in the capital structure of -0.089179.

- 4. Variable structure a has a value of 0.094853 with a positive coefficient, the results illustrate that each increase of one unit of asset structure assuming 1 variable other fixed (constant) then it will be an increase in the capital structure of 0.094853.
- 5. The profitability variable has a value of -0.105784 with a coefficient of 1 variable, so the results illustrate that every increase in one unit of profitability with the assumption that 1 other ariable is constant (constant), there will be a decrease in the capital structure of -0.105784.

# 4.1.7. Hypothesis Test

#### 4.1.7.1. Statistical Test (t)

The variable t test aims to determine the effect of each independent variable on the dependent variable. In other words, to test variable -variable independent partial effect or no effect on variable dependent. To find out the t test value, the significance level is 5%. Decision making can be made as follows:

- 1. If the value t table and *p*-value < 0.05then  $H_1$ is accepted H<sub>0</sub> of t <sub>count</sub> > is rejected, meaning that partially independent variable affects dependent variable .
- 2. If the value of t arithmetic <t table and *p*-value > 0.05 then H<sub>0</sub> accepted H<sub>1</sub> rejected, meaning that partially variable independent no significant effect on variable dependent.

	Tabel 4.	15. Results Test	t	
Variable	Coefficient	Std. Error	t-Statistic	Prob.
GO	0.056832	0.020801	2.732183	0.0103
NDTS	-0.089179	0.121292	-0.735242	0.4677
SA	0.094853	0.126721	0.748522	0.4598
PROFITABILITAS	-0.105784	0.028025	-3.774594	0.0007
С	0.163314	0.143657	-1.136836	0.2643

# Tabal 4

Source: Output Eviews versi 10.0

By using as many observations (n = 36), the number of 1 independent variable is 4 (k = 4), then the degree of freedom (df) = nk-1 = 36-4-1 = 31, where the significance level is  $\alpha = 0.05$ , then t<sub>table</sub> can be determined with Ms. Excel with the following function formula:

 $t_{table} = TINV$  (Probability, deg\_freedom)

 $t_{table} = TINV (0.05, 31)$ 

 $t_{table} = 2.039513$ 

Here are the results of hypothesis testing or test results 1 ariable 1 (t test):

- 1. Results from test variable Growth Opportunity shows that the value of t arithmetic greater than t table (2.732183 > 2.039513) and the results of the probability at 1 aria less than significant level (0.0103 > 0.05). So it can be concluded that H<sub>1</sub> is **accepted**. With this it can be said that there is an influence between Growth Opportunity on Capital Structure.
- 2. The test results variable Non-Debt Tax Shield indicate that the value of t count is smaller than t table ( -0.735242 < 2.039513 ) and the results of the probability of the first aria is greater than the significant level (0.4677 > 0.05). So it can be concluded that H<sub>2</sub> is **rejected**. With this it can be said that there is no influence between the Non Debt Tax Shield on the Capital Structure.
- 3. The test results variable Structure Asset Value indicates that the value of t count is smaller than t table (0.748522 < 2.039513) and the results of the probability of the first aria is greater than the significant level (0.4598 > 0.05). So it can be concluded that it is **rejected**. With this it can be said that there is no influence between Asset Structure on Capital Structure.
- 4. The test results variable profitability indicates that the value of t <sub>count</sub> is smaller than t <sub>table</sub> ( -3.774594 > 2.039513) and the results of the probability at variable less than significant level

( 0.0007 < 0.05 So it can be concluded that  $H_4$  accepted. With this it can be said that there is an **influence** between Profitability on Capital Structure.

#### 4.1.7.2. Simultaneous Test (F)

#### Tabel 4. 14. Results of the F Test Analysis

Dependent Variable: STRUKTUR\_MODAL Method: Panel EGLS (Cross-section random effects) Date: 08/29/20 Time: 18:01 Sample: 2016 2019 Periods included: 4 Cross-sections included: 9 Total panel (balanced) observations: 36 Swamy and Arora estimator of component variances

R-squared	0.374335	Mean dependent var	-0.004865
Adjusted R-squared	0.293604	S.D. dependent var	0.059810
S.E. of regression	0.050268	Sum squared resid	0.078334
F-statistic	4.636813	Durbin-Watson stat	1.992923
Prob(F-statistic)	0.004742	$\mathbf{x}$	

Source: Output Eviews versi10.0

Based on above, the panel data regression results obtained F <sub>count</sub> of 4.636813 with a p- value of F-statistic of 0.004742. Based on the F <sub>table, the</sub> value is 2.678667 with df <sub>1</sub> = (k-1) = (5-1) = 4 and df <sub>2</sub> = (nk) = (36-5) = 31 with degrees of freedom  $\alpha = 0.05$  ( $\alpha = 5\%$ ). This means that F <sub>count</sub> > F <sub>table</sub> or equal to 4.636813> 2.678667 with p- value F-statistic < $\alpha$  or equal to 0.004742 <0.05, which means that Growth Opportunity, Non Debt Tax Shield, Asset Structure, and Profitability simultaneously have an effect. on Capital Structure.

#### **4.1.7.3.** Test The Coefficient of Determination (**R**<sup>2</sup>)

The coefficient of determination ( $\mathbb{R}^2$ ) is a coefficient that represents the percentage effect of all independent variables in explaining variables. The coefficient of determination is one and zero. Rated  $\mathbb{R}^2$  are small means the ability of independent variables in explaining the independent variable is very limited. While the value of  $\mathbb{R}^2$  are approaching one means of independent variables provide almost all the information needed to predict the dependent variable . The following is the *output* data for the coefficient of determination test in this study:

 Tabel 4. 15. Results Tests Coefficient of Determination (R<sup>2</sup>)

 Dependent Variable: STRUKTUR\_MODAL

 Method: Panel EGLS (Cross-section random effects)

 Date: 08/29/20

 Time: 18:01

 Sample: 2016 2019

 Periods included: 4

 Cross-sections included: 9

 Total panel (balanced) observations: 36

Swamy and Arora estimator of component variances		
R-squared	0.374335	Mean dependent v

R-squared	0.374335	Mean dependent var	-0.004865
Adjusted R-squared	0.293604	S.D. dependent var	0.059810
S.E. of regression	0.050268	Sum squared resid	0.078334
F-statistic	4.636813	Durbin-Watson stat	1.992923
Prob(F-statistic)	0.004742		
Source: <i>Output Eviews versi 10.0</i>			

Based on data from variable above, that the AdjustedR-Squared of 0.293604, this suggests that 29.3604% of the variation in the Company's capital structure results Agricultural Sector 2016-2019 period can be explained by one ariable in the study of Growth Opportunity, Non-Debt Tax Shield, Asset Structure, and Profitability. While the remaining 70.6396% is explained by other factors outside the regression model in this study.

#### 4.2. Interpretation of Research Results

#### 4.2.1. The Effect of Growth Opportunity on Capital Structure

The first hypothesis (H<sub>1</sub>) states that growth opportunity has a positive effect on accepted capital structure, this can be seen from the value of the growth opportunity coefficient of 2.732183 with  $t_{count}$  greater than t table (2.732183> 2.039513) and the probability value in 1 aria is smaller. from a significant level (0.0103 <0.05), Growth Opportunity has a positive and significant effect on Capital Structure. This shows that the high value of Growth Opportunity causes companies to need additional capital to develop their companies. Where the high growth opportunity will be more attractive to investors in obtaining profits, giving rise to confidence for investors to invest. In addition, with high growth opportunity, the use of debt in the capital structure will be even greater. Because, with the increasing growth opportunity companies will get external funding to finance their new investments.

The results of this study are in line with the research of Fachri and Adiyanto (2019) that growth opportunities have a positive effect on capital structure. However, contrary to research by Dewi, and Dana, (2017) and Barqoya, (2019) that growth opportunity has a 1 ariable effect on capital structure. Meanwhile, the results of research conducted by Anggita and Suryawati (2018) suggest that growth opportunity has no effect on capital structure.

#### 4.2.2. The Effect of Non Debt Tax Shield on Capital Structure

The second hypothesis  $(H_2)$  which states that the non debt tax shield has a positive effect on the capital structure is rejected, it can be seen from the non debt tax shield coefficient value of -0.735242 with t count smaller than t table (-0.735242 < 2.039513) and the value The probability is greater than the significant level (0.4677> 0.05), so the non debt tax shield has no effect on the Capital Structure. This is because the high depreciation illustrates that the company has 1 fixed aria which is quite high. Where the high of 1 fixed aria is invested, the total depreciation will increase and the greater the benefits of the tax reduction received. So that the source of funds originating from internal sources will be higher and will result in lower external funding needs, namely debt. In accordance with the pecking order theory, the more internal funds it has, the company will use its internal funds first.

The results of this study are in line with research conducted by Tamam, and Wibowo, (2017), Prasetya and Asandimitra (2014) and Muhammadinah (2017). In contrast to research Dawud Hidayat (2019) that non-debt tax shield effect 1 ariable significantly to the capital structure. In contrast to the research of Wulandari, and Artini, (2019) and Miraza, and Muniruddin, (2017) that the non-debt tax shield has a positive effect on capital structure.

#### 4.2.3. The Effect of Asset Structure on Capital Structure

The third hypothesis (H<sub>3</sub>) which states that the asset structure has a positive effect on the capital structure is rejected, this can be seen from the value of the asset structure coefficient of 0.748522 with t<sub>count</sub> smaller than t<sub>table</sub> (0.748522 < 2.039513) and the probability value is greater than the significant level. (0.4598> 0.05), then the asset structure has **no effect** on the capital structure. This is because the type of companies that can be guaranteed is not the first multipurpose not so good to be used as collateral. Therefore the creditor will choose another 1 aria agreement so that an additional 1 aria fixed by the company does not affect the company's capital structure.

The results of this study are in line with the research of Wulandari, Wijayanti, and Endang W (2018) suggesting that the structure of 1 aria has no effect on capital structure. Contrary to the research of Indra, Hidayat, and Azizah, (2017), they suggest that the structure of 1 aria has a positive effect on capital structure.

#### 4.2.4. The Effect of Profitability on Capital Structure

The fourth hypothesis (H<sub>4</sub>) which states that affect profitability negatively on the capital structure dit erima, it can be seen from the value of the coefficient profitability of -3.774594 with t<sub>count</sub> is smaller than t<sub>table</sub>(-3.774594> 2.039513) and the probability value is less than the level significant (0.0007 < 0.05), the profitability **impact and significant** to modal.Hal structure shows that the higher the profitability will decrease the level of the capital structure. Where financial managers prioritize sources of funds originating from their own capital, namely, retained earnings before deciding to take sources of funds from outside the company. In accordance with the pecking order theory, companies prefer funding that comes from internal companies. However, if funds from outside are required the company will issue securities first.

The results of this study are in line with research conducted by Ratri and Christianti (2017) which states that profitability has a significant and 1 ariable effect on capital structure. In contrast to the research of Dewi and Sudiartha (2017), it is stated that profitability has a positive and significant effect on capital structure. In contrast to research from Widayanti, Triaryati, and Abundanti (2016), it is stated that profitability has no effect on capital structure.

# 4.2.5. The Effect of Growth Opportunity, Non Debt Tax Shield, Asset Structure, and Profitability on Capital Structure

The fifth hypothesis (H  $_5$ ) which states that growth opportunity, non debt tax shield, asset structure, and profitability simultaneously affect capital structure is accepted, this can be seen from the mean value (f <sub>count</sub> > f <sub>table</sub>) (4.636813> 2.678667) with a p-value (F-statistic < $\alpha$ ) or equal to (0.004742 <0.05), which means that Growth Opportunity, Non Debt Tax Shield, Asset Structure, and Profitability simultaneously affect the Capital Structure. The results of this study are supported by research conducted by Prasetya and Asandimitra (2014) stated that profitability, company size, growth opportunity, asset structure, and non-debt tax shield simultaneously on the capital structure.

# V. CONCLUSIONS AND SUGGESTIONS

# 5.1. Conclusions

Based on the results of the analysis and interpretation of the results of the research conducted, the following conclusions can be drawn :

- 1. Growth Opportunity has a positive and significant effect on Capital Structure.
- 2. Non Debt Tax Shield has no effect on Capital Structure.
- 3. Asset Structure has no effect on Capital Structure.
- 4. Profitability has a negative and significant effect on capital structure.
- 5. Growth Opportunity, Non Debt Tax Shield, Asset Structure, and Profitability simultaneously affect the capital structure.

# 5.2. Suggestion

Based on the above conclusions, suggestions drawn from the study are as follows:

1. For company, should be in determining the capital structure policy needs to pay attention to profitability first. If the company gets high profitability, you should use internal funds first rather than using debt to fund its operational activities. So as to minimize the risk of bankruptcy for the company.

- 2. For further research, you should add variable -variable that influence the capital structure to improve the results of further research. In addition, extending the study period and added a number of samples and the use of company 1 ariab other to serve as a comparison.
- 3. For investor, before the loan gave the first to see the financial condition of the company, so investors 1 ari obtain information on how the financial condition of companies that will be able to take the right decision in mennginvestasikan funds.

# 5.3. Research Limitations and Further Research Development

- 1. Companies that are used as research are limited to Agricultural Sector Companies. Further researchers are expected to use 1 other ariab on the Indonesia Stock Exchange
- 2. The study only used 4 periods, namely 2016, 2017, 2018, and 2019. For future researchers, if they want to study a similar problem, they should do more than four periods.
- 3. The study only used 4 independent variables, namely growth opportunity, non debt tax shield, asset structure, and profitability. For future researchers, it is expected to add variable or use moderation.
- 4. Measurement of variable capital structure using DER ( Debt Equity Ratio ).



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