

# Variables Affecting the Capital Structure of Agricultural Companies

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## Abstract

The purpose of this study was to determine whether there is a significant effect of Sales Growth, Company Growth, and Asset Structure on Capital Structure. The research method used is the explanatory method. This study uses secondary data, such as financial statements, annual reports and other information related to the agricultural sector listed on the Indonesia Stock Exchange. The sample was taken as many as 17 companies using the purposive sampling method for the period 2016 to 2020. The data analysis method used in this study is panel data regression. Based on the results of the study, it can be concluded that Sales Growth and Asset Structure have an effect on Capital Structure but Company Growth has no effect on Capital Structure. The suggestions are aimed at companies where the results of this study can be used as a reference in making decisions on the capital structure of agricultural companies, especially company growth, and asset structures that affect capital structure, for investors the results of this study can be used as evaluation material in investment decisions, and for further researchers the results of this study can be used as a reference and can expand the variables and research period.

## Keywords

Capital Structure, Sales Growth, Company Growth, and Asset Structure

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## Research Background

The company's financial funding decisions greatly affect the composition of the company's capital structure. The funding conclusion determines the company's ability to carry out the company's operating activities and the ability to bear the company's own risk. The problem of capital structure is a very important problem for every company because the company's financial position will be impacted by capital structure. The sustainability of the company is affected by the false in determining the capital structure, especially if the company is too large to use debt because the company's bear is getting bigger as well. The company's financial risk is increase if the company cannot pay the interest expense or debt installments because of the false in formative capital structure. Determination of capital structure can affect investor considerations in determining whether he will invest in a company or not, so it is important for companies to determine the best possible capital structure. In determining the finest capital structure there is a consideration between risk and return. According to (Gitman, Juchau, & Flanagan, 2015), it is explained that using more debt means increasing risk, but also increasing the expected rate of return. In practice, it is difficult for companies to determine the optimal capital structure. However, companies usually have their own target capital structure which is considered the most profitable for the company. So if the target is achieved, it is assumed that the company's capital structure has been optimal. The capital structure is measured in this research by the ratio of Debt Ratio. The tendency of increasing the value of Debt Ratio in the corporation is assumed caused by decreased revenue or sales. This decrease in income was due to, among others, the declining purchasing power of the people, the weak rupiah exchange rate, and the smaller profits. Because of this the company will use debt to support its operational activities. The factors that can affect the capital structure needed to concentrate by companies. According to (Brigham & Houston, 2021) capital structure can be influenced by several factors, namely, sales stability, asset structure, operating leverage, growth rate, profitability, taxes, control, management attitude, attitude of lenders and rating agents, market conditions, the company's internal conditions, and financial flexibility. The capital structure factors used in this study are Sales Growth, Company Growth, and Asset Structure which are tested for their influence on Capital Structure. The first indicator that affects the company's capital structure in the agricultural sector for the 2016-2020 periods in this study is sales growth. According to (Brigham & Houston, 2021), companies with relatively stable sales can get more loans than companies with unstable sales, because the need for funds used by a company with high sales levels will be even greater. The next indicator that affects the company's capital structure in the agricultural sector for the 2016-2020 periods in this study is company growth. Company growth is an increase or decrease in the total assets owned by the company. According to (Brigham & Houston, 2021) it is stated that companies that have faster growth must rely more on external capital. The last indicator that affects the company's capital structure in the agricultural sector for the 2016-2020 periods in this study is the asset structure. Asset structure is defined as the composition of company assets which shows how much company assets can be used as collateral to obtain loans. According to (Brigham & Houston, 2021) "Companies whose assets are adequate to be used as loan collateral tend to use a lot of debt". Based on the explanation above, the researcher will conduct research with the aim of knowing the effect of Sales Growth, Company Growth, and Asset Structure on Capital Structure in agricultural sector companies listed on the Indonesia Stock Exchange for the 2016-2020 periods.

## Literature Review

### Capital Structure

The capital structure is part of the company's financial structure that reflects the funding decisions made by the company in carrying out operational activities and developing its business. The company's capital structure is sourced from external capital (foreign capital) and internal capital (own capital). External capital referred to in this case is debt, both long-term and short-term. Meanwhile, internal capital can consist of retained earnings and also the inclusion of company ownership. Capital structure is part of the financial structure which is a comparison between unknown assets (short debt and long term debt) and own wealth (retained earnings and shares) used by the company. (Gitman et al., 2015; Shapiro & Hanouna, 2019) The capital structure is

formulated with Debt to Equity ratio (DER) as research conducted by (Ichsani & Susanti, 2019). This ratio aims to measure how much debt is used in marking the company's capital.

## Sales Growth

Sales growth is a transform in sales increase or decrease from year to year which can be seen in the company's income statement. A good company can be seen from its sales from year to year which continue to increase, this has an impact on increasing company profits so that the company's internal funding also increases. Sales growth in (Wijaya & Yustina, 2019) is measured by the difference between sales in a given year minus the earlier year's sales divided by the earlier year's sales. The rate of sales growth is a variable with a ratio scale.

## Company Growth

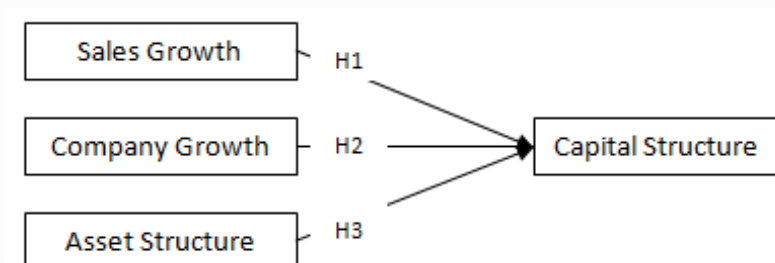
The company's growth shows the allocation of asset investment by the company. According to (Brigham & Houston, 2021) company growth is expressed as total asset growth where past growth will describe future profitability and future growth. Company growth is a change in the form of an increase or decrease in the total assets owned by the company in a certain year or period.

## Asset Structure

Asset structure is the composition of the company's assets which are the support and guarantee for the company in the continuity of its operations. Asset structure is all resources and assets owned by the business to be used or as collateral in its operational activities. Asset structure is the proportion of fixed assets owned by the business. The asset structure can be formulated by comparing current assets with total assets. (Hwihanus & Ramadhani, 2019)

## Research Hypothesis

Picture 1 Research Hypotesis



H1: Sales Growth affects Capital Structure

H2: Company Growth affects Capital Structure

H3: Asset Structure affects Capital Structure

## Research Method

The object of research that will be examined in this study consists of sales growth, company growth, asset structure and capital structure of agricultural sector companies listed on the Indonesia Stock Exchange (IDX) for the 2016-2020 periods. The sample selection in this study used purposive sampling method. Based on the criteria in the sample selection process, the numbers of samples used in this study were 17 companies. The selected companies are as follows:

**Table 1.**  
Sample Companies

No	Company Names
1	Astra Agro Lestari Tbk
2	Austindo Nusantara Jaya Tbk
3	BISI International Tbk
4	Eagle High Plantations Tbk
5	Dharma Samudera Fishing Industries Tbk
6	Dharma Satya Nusantara Tbk
7	Golden Plantation Tbk
8	Gozco Plantations Tbk
9	Jaya Agra Wattie Tbk
10	PP London Sumatra Indonesia Tbk
11	Multi Agro Gemilang Plantation Tbk
12	Provident Agro Tbk
13	Sampoerna Agro Tbk
14	Smart Tbk
15	Sawit Sumbermas Sarana Tbk
16	Salim Ivomas Pratama Tbk
17	Bakrie Sumatera Plantations Tbk

## Research Result

**Table 2**  
Research Result

Dependent Variable: CS  
Method: Panel Least Squares  
Date: 03/05/21 Time: 09:40  
Sample: 2016 2020  
Periods included: 5  
Cross-sections included: 17  
Total panel (balanced) observations: 85

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.921314	1.125607	-0.818505	0.4193
SG	3.592079	0.661277	5.432036	0.0000
CG	-0.474672	0.672684	-0.705639	0.4837
AS	8.840042	3.272975	2.700919	0.0111

Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.597016	Mean dependent var		1.261422
Adjusted R-squared	0.553829	S.D. dependent var		1.331624
S.E. of regression	0.509110	Akaike info criterion		1.737242
Sum squared resid	8.034984	Schwarz criterion		2.299315
Log likelihood	-25.08794	Hannan-Quinn criter.		1.946777
F-statistic	20.77061	Durbin-Watson stat		2.316122
Prob(F-statistic)	0.000000			

## Regression Model

The regression model for this study based on the data information in table 2 is as follows:

$$CS = -0,921314 + 3,592079 SG - 0,474672 CG + 8,840042 AS$$

Where:

CS = Capital Structure  
SG = Sales Growth  
CG = Company Growth  
AS = Asset Structure

From the regression model can be explained below:

1. The constant is -0.921314 which indicates that when sales growth, company growth, and asset structure are equal to zero, the capital structure decreases by 0.921314.
2. Sales growth regression coefficient value of 3.592079 indicates that if sales growth increases by one unit, then capital structure will rise by 3.592079.
3. The company's growth regression coefficient of -0.474672 indicates that if the company's growth increases one unit, the capital structure will decrease by 0.474672.
4. The value of the asset structure regression coefficient of 8.840042 indicates that if the asset structure increases one unit, will increase by 8.840042.

## F-Test

Based on table earlier on top of, it can be explained that the Prob value (F-statistic) is 0.000000 which is smaller than the 5% significance level, because the Prob (F-statistic) value < significance level, it can be completed that the independent variables as a whole have an influence which is significant to the dependent variable and the regression model used is correct.

## T-Test

Based on the table 2 above, it shows the results that can be explained as follows:

1. Sales growth variable has a possibility value of 0.0000 which is smaller than the significant level. From these results it can be concluded that sales growth has an influence on the capital structure.
2. The company growth variable has a probability value of 0.4857 which is bigger than 0.05. From this effect it can be accomplished that the company's growth has no cause on the capital structure.
3. The asset structure variable has a probability value of 0.0111 which is smaller than 0.05. From these outcomes it can be completed that the asset structure has an influence on the capital structure.

## Determination Coefficient

Based on the table above, the R-square value in the statistical estimation results using the fixed effect approach is 0.597016. This means that the free variable has an effect of 59.7% on the capital structure, while the rest can be influenced by other variables outside of this research variable.

## Discussion

The first hypothesis (H1) in this study is that sales growth affects the capital structure. The results show that sales growth affects the capital structure, so H1 is accepted which indicates that the high or low sales growth is one of the determinants in the company's capital structure decision. These are in line with those expressed by experts, which according to (Brigham & Houston, 2021), state that companies with relatively constant sales can obtain more loans than companies with unstable sales, because of the need for funds used by a company with a high level of sales will be even greater. The outcome are in line with those conducted by (Wijaya & Yustina, 2019) which states that sales growth has a positive effect on capital structure. The second hypothesis (H2) in this study is that company growth affects the capital structure. The results showed that the company's growth had no effect on the capital structure, so H2 was rejected which indicated that the high or low growth of a was not a determinant in the company's capital structure decision. Those are not in line with those expressed by experts, where according to (Brigham & Houston, 2021) fast-growing companies be likely to use more liability than slow-growing companies. So



when a company has a high growth rate and is increasing, it implies a greater need for funding and vice versa. The fallout are in line with what was done by (Hwihanus & Ramadhani, 2019) which stated that the company's growth had no effect on the capital structure. The hypothesis 3 in this study is that the asset structure affects the capital structure, so H3 is accepted which indicates that the size of the asset structure is one of the determinants in the company's capital structure decision. The results are in line with those expressed by experts, where according to (Brigham & Houston, 2021) "Companies whose assets are adequate to be used as loan guarantees tend to use debt quite a lot". So that the advanced the structure of the company's assets sees the upper the ability of the company to be capable to promise the long-term debt it borrows. Conversely, the lower the asset structure of a company indicates the lower the company's ability to guarantee its long-term debt. The results of this study are in line with those of (Sausan, Korawijayanti, & Ciptaningtias, 2020) which state that the asset structure affects the capital structure.

## Conclusions and Suggestions

### Conclusions

Sales growth and asset structure affect the capital structure. Company growth does not affect the company's capital structure

### Suggestions

- Purpose of capital structure is a vital issue for every company because the good or bad capital structure will have direct consequences on the company's financial position. Therefore, the variables that affect the capital structure that have significant results in this study, namely Sales Growth, and Asset Structure can be used as considerations for the management in making capital structure decisions. Thus, the company can determine the composition of the right capital structure for the company.
- In making investment decisions in agricultural sector companies, these results can be used as information for investors to determine the right investment choices so that investors can obtain the expected level of return by considering the level of risk that will be faced.
- It is recommended for further researchers to expand the research sample, not just one sector and the variables used are not limited to this study, so it is hoped that new variables will be used in addition to the variables above and the research period can be extended

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