



INFLUENCE OF ASSETS STRUCTURE, ASSET GROWTH, TAXES, AND PROFITABILITY ON CAPITAL STRUCTURE ON MULTIPLE INDUSTRIES

Jessy Safitri Sitorus¹, Josef Ebenezer Simanjuntak², Rizky Chairunnisyah³,
Dessy Natalia Maduwu⁴
^{1,2,3,4} Universitas Prima Indonesia
Email: sitorusjessy7@gmail.com

Abstract

The study is conducted to identify how influential the structure of assets, the growth of assets, taxes, as well as the profitability of the structure of the capital in the enterprise sector of various industries the period 2017-2019. Population studies have amounted to 45 companies that listed in Indonesia Stock Exchange (BEI). The sample used is a number of 20 companies multiplied by 3 years, namely 60 samples. The data analysis method used is statistical analysis descriptive and multiple linear regression analysis. The results of this study show that simultaneously asset structure, asset growth, taxes, and profitability have a significant effect on capital structure. Partially, asset structure, asset growth, taxes, and profitability do not have a significant effect on capital structure.

Keywords: Asset Structure, Asset Growth, Taxes, Profitability, Capital Structure.

INTRODUCTION

The Indonesia Stock Exchange (IDX) or Indonesia Stock Exchange (IDX) is an institution that organizes or regulates programs and media to combine securities buying and selling agreements of other parties who intend to trade securities between all parties. The various industrial sector (sector code 4) is an IDX sector that is included in the manufacturing industry category, namely industries that manage raw materials to produce finished materials (products) or semi-finished products (components)[1]. Manufacturing industry is also known as factory. Companies in the various industrial sectors are one of the companies that have an impact on the country's economic income, where various investors provide funds as investments[2]. Seeing the progress of the

times that continue to grow well, all companies compete with each other in a sporting manner to maintain their business as best they can[3]. Each company certainly needs a large enough capital in order to be able to advance and enlarge its business so that it gets high profits. Without sufficient capital, the company can carry out its activities, but its activities will be very limited. Therefore, all existing companies do not only use their own capital. Instead, it gets capital from various other parties who also want to cooperate with it. A number of parties used by companies to obtain capital are investors, banks, and the capital market[4].

Capital structure is important because decisions regarding capital structure cause risks that must be borne by the owners of the company in addition to causing a





certain rate of return. Each source of capital has a varying level of risk and rate of return. The asset structure in this research is symbolized by "Fixed Assets (FA)" or "fixed assets" which are used as collateral to meet the company's needs. The asset structure describes the proportion between local assets and the company's fixed assets. Because companies that have high fixed assets actually facilitate the acquisition of capital from outside the company[5].

Investors will be more interested in investing when the growth of a company's assets is getting better. Where the profit generated by the company is getting bigger. Usually investors will invest in tangible forms, for example land, precious metals, machinery, construction, and others, and can also invest in financial assets such as deposits or purchases of securities in the form of stocks or bonds. The various industrial sector indexes were the sectors that recorded the biggest minus *yield* in the first nine months of trading on the IDX, declining by 16.05 percent. Stocks belonging to the various industrial sectors were hit by sales activities in line with stronger competition from global players and the slowdown in the economy which led to a decline in domestic demand. Even the potential for bankruptcy is felt by one of the big players in the industry. From the data recorded above, we are interested in researching "The Influence of Asset Structure, Asset Growth, Taxes and Profitability on Capital Structure in Multi-Industrial Sector Companies listed on the Indonesia Stock Exchange (IDX) in 2017-2019"[6].

For the company PT.Indo -Rama synthetics Tbk (INDR), total fixed assets in 2017 – 2018 decreased by Rp.22,153,057. Total assets in 2017-2018 increased by Rp. 5,810,307. Annual tax in 2017-2018 increased by Rp.3,059,930. Net profit increased by Rp.60,552,980. Total Debt decreased by Rp.59,336,935[7].

For the company PT.Garuda metalindo Tbk (BOLT), total assets in 2018 - 2019 decreased by Rp.22,311,870,779. Total assets in 2018 - 2019 decreased by Rp.46,464,768,495. Annual Tax in 2018-2019 decreased by Rp.254,028,500. Net profit in 2018 – 2019 decreased by Rp. 24,245,494,089. Total debt in 2018 – 2019 decreased by Rp.69,457,019,020[8].

For the company PT. Selamat Sempurna Tbk, total fixed assets in 2018-2019 increased by Rp. 1,392. Total assets in 2018-2019 increased by Rp.305,778. Annual tax in 2018 -2019 increased by Rp.2,673. Net profit in 2018-2019 increased by Rp. 5,126 and Total Debt in 2018-2019 increased by Rp. 13,752[9].

For the company PT. Trisula Textile Industries Tbk (BELL), total assets in 2018 – 2019 increased by Rp. 10,773,051,705. Total assets in 2018 – 2019 have increased by Rp.6,000,000,000. The annual tax in 2018-2019 has increased by Rp.262,538,611. Net Profit in 2018 – 2019 decreased by Rp. 809,130,885. Total debt in 2018 – 2019 has increased by Rp.59,067,547,962[10].





Capital structure decisions affect how much risk investors face and the high rate of return or expected rate of return[11].

RESEARCH METHODS

The main goal of the company is to get as much profit as possible. Therefore, all of the company's operational activities will focus on how the company can produce a lot of profit and assets. This is in line with the "pecking order theory", which is the company that have a high income tend to have low debt[12]. Sample is a requirement determined by researchers who are part of the population. In this research, the method used is purposive sampling method[13].

No	Kriteria	Jumlah Sampel
1	Perusahaan sektor aneka industri yang terdaftar di BEI periode 2017 – 2019	45
2	Perusahaan sektor aneka industri yang terdaftar di BEI yang tidak menerbitkan laporan keuangannya dengan lengkap secara berurutan pada periode 2017-2019	(16)
3	Perusahaan sektor aneka industri yang terdaftar di BEI yang mengalami rugi periode 2017 – 2019	(9)
	Tahun periode	3
	Jumlah sampel (20 x 3)	60

Sumber : www.idx.co.id

Figure 1. Research Sample

Normality test has the aim of knowing why in the regression model, the variables are normally distributed. Basically, the t and f tests assume that the residual value follows the normal distribution. The independent variables are related to each other, making the variables not orthogonal. Orthogonal variables are independent variables with a correlation level of zero among the independent variables. Thus the tolerance value is slightly equivalent to a large VIF value. The cut off value commonly used to show the occurrence of multicollinearity is the total tolerance 0.10 or the equivalent VIF value 10[14].

Autocorrelation test aims to identify a relationship between confounding errors in period t and period t-1 in the regression. If there is a correlation, it is called an autocorrelation. By conducting a run test, it becomes a way of determining whether there is an autocorrelation problem. The run test is part of the non-parametric statistics used to measure whether there is a high correlation between the residuals. If there is no correlation between the residuals, it can be concluded that the residual is random. In this test, the criteria for determining the decision are Residual random if significant > 0.05

H_A: Residual is not random if the significance is < 0.05

Research Data Analysis Model Multiple Regression Analysis

To identify the effect of the independent variable and the dependent variable, we use this multiple linear analysis formula[15]:

$$Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + e$$

For research, there is information, namely:

Y = Capital Structure

a = "Constant"

b₁ = "X Variable Regression Coefficient"

b₂ = "Regression Coefficient of Variable X"

b₃ = "Regression Coefficient of Variable X"

b₄ = "X Variable Regression Coefficient"

x₁ = "Asset Structure Variable"

x₂ = "Asset Growth Variable"

x₃ = "Tax Variable"

x₄ = "Profitability Variable"

e = "Percentage Error"





Coefficient of Determination Test (R²)

Coefficient of determination (R²) is between 0 and 1. If the result of R² is low, the ability of the independent variable to describe the type of dependent variable is very small. A value that is close to 1 means that it is needed to predict the type of dependent variable.

Simultaneous Significant Test (F-Test)

F statistical test initially shows whether all the independent variables included in the model have an effect similar to the dependent variable. The null hypothesis that will be tested is whether all parameters in the model are similar to zero, or: $H_0 : b_1 = b_2 = \dots - b_k = 0$

That is, whether all the independent variables do not represent a significant explanation of the dependent variable. The alternative hypothesis is that not all barometers are equal to zero at the same time, or: $H_A : b_1 b_2 \dots b_k \neq 0$

That is, all independent variables simultaneously as a significant explanation of the dependent variable.

Partially Significant Test (t-test)

The initial t-statistical test showed the magnitude of the effect of a partially independent variable in explaining the variations of the dependent variable. H_0 being tested is whether a parameter (b_i) is equal to zero, or: $H_0 : b_i = 0$

It means whether an explanatory independent variable does not describe a significant explanation on the dependent

variable. H_A is a barometer of a variable that is different from zero, or: $H_A : b_i \neq 0$. That is, the variable is a significant explanation of the dependent variable.

Table 1. Descriptive statistics

	N	Minimum	Maximum	Mean	Std. Deviation
X1_STRUKTURAKTIVA	60	.00	60.00	6.0177	15.48341
X2_PERTUMBUHANAS E T	60	-.43	20.00	1.5770	3.85374
X3_PAJAK	60	102.00	3450.00	475.3167	613.59440
X4_PROFITABILITAS	60	.00	30.00	2.5020	6.46330
Y_STRUKTURMODAL	60	.07	130.00	11.6475	30.19415
Valid N (listwise)	60				

RESULTS AND DISCUSSION

The purpose of the normality test is to measure whether in the regression model, the areidual variables are normally distributed.

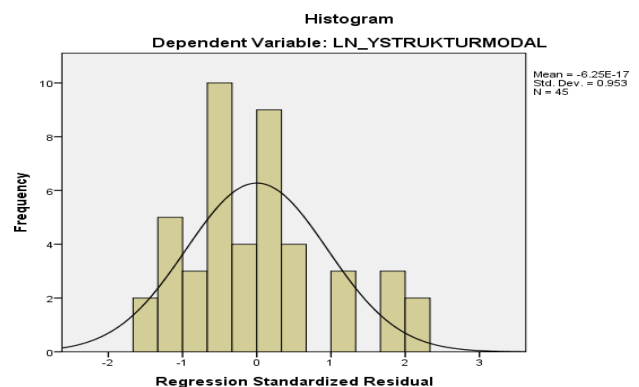


Figure 2. Histogram Graphic

The hologram graphic above shows the curve graph tends to be symmetrical. So the conclusion is that the data is normally distributed.



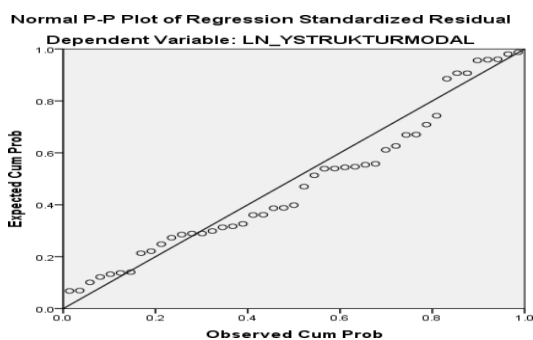


Figure 3. P-Plot Normality Test Graph

Referring to the figure shows the plot forming a diagonal line. Thus, it can be concluded that the data are normally distributed.

Table 2. Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		45
Normal Parameters ^{a,b}	Mean	0E-7
	Std. Deviation	1.65940202
Most Extreme Differences	Absolute Positive	.128
	Negative	-.074
Kolmogorov-Smirnov Z		.859
Asymp. Sig. (2-tailed)		.451

Based on the results of the Kolmogorov Smirnov normality test, it shows the statistical test results that the variables of Asset Structure, Asset Growth, Taxes, Profitability, and Capital Structure are in accordance with the requirements of normal distribution because the significant value is $0.451 > 0.05$.

Table 3. Collinearity Statistics

Model	Collinearity Statistics	
	Tolerance	VIF
LN_X1STRUKTURAKTIVA	.913	1.095
1 LN_X2PERTUMBUHANASET	.933	1.071
LN_X3PAJAK	.926	1.080
LN_X4PROFITABILITAS	.837	1.195

Table 4. Collinearity Statistics

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.298 ^a	.089	-.002	174.040	1.843

Based on the multicollinearity table, the tolerance value for the Asset Structure, Asset Growth, Tax, Profitability variables is > 0.01 while the VIF value is < 10 then it is said not to experience multicollinearity.

The results of the Durbin-Watson (DW) test show a value of 1.843 while in the table DW for "K" = 4 (independent variable) and N = 60, with a value of dL (lower limit) = 1.4443 and dU (upper limit) = 1, 7274; $4-dU = 2.2726$. The criteria for assessing research data that are free of autocorrelation are $dU < DW < 4-dU$.

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The criteria for assessing research data that were free of autocorrelation were $dU < DW < 4-dU$. From the results of this research, it can be seen that $1.7274 < 1.843 < 2.2726$ so that it can be concluded that there is no autocorrelation.



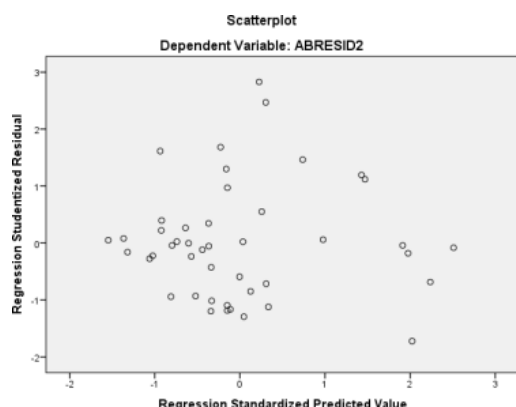


Figure 4. Heteroscedasticity Test

From the scatterplot graph above, it can be said that there is no heteroscedasticity, it can be seen from the data points that are scattered randomly and are not collected in one place. In addition to using the Scatterplot graph, the Heteroscedasticity test can also be tested using the Glacier test.

Table 4. Glejser Coefficients Test

"Model"	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error			
(Constant)	17.328	4.227		4.099	.000
X1_STRUKTURAKTI VA	-.258	.196	-.168	-1.315	.194
X2_PERTUMBUHAN ASET	.988	.780	.161	1.267	.211
X3_PAJAK	-.003	.005	-.090	-.706	.483
X4_PROFITABILITAS	.782	.471	.213	1.658	.103

In the Glacier test table, it is shown that the Asset Structure has a significant value of 0.194, the Asset Growth variable has a significance value of 0.211, the tax variable has a significance value of 0.483 and the profitability variable has a

significant value of 0.103, so it can be concluded that there is no heteroscedasticity. Because the significant value of the Asset Structure, Asset Growth, Tax, and Profitability variables > 0.05.

Table 5. Glejser Coefficients Test

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error			
(Constant)	.958	1.846	.519		.607
LN_X1STRUKTURAKTI VA	.058	.145	.063	.400	.691
LN_X2PERTUMBUHAN ASET	.074	.148	.078	.501	.619
LN_X3PAJAK	-.002	.300	-.001	-.007	.995
LN_X4PROFITABILITAS	.236	.140	.277	1.678	.101

The results of the regression equation in the table above can be described as:

$DER = 0.958 + 0.058FAR + 0.074Asset Growth - 0.002Tax + 0.236ROE$. The constant value of 0.985 shows that if the asset structure, asset growth, taxes, and profitability are constant, the capital structure is 0.985 units. The regression coefficient value of the asset structure is 0.058 and has a positive value, meaning that every 1 unit increase in the asset structure will have an impact on increasing the asset structure, which is 0.058 units. The regression coefficient value for asset growth is 0.074 and has a positive value, meaning that every 1 unit increase in asset growth will have an impact on increasing asset growth, which is 0.074 units. The value of the tax regression coefficient is 0.002 and has a negative value, meaning that every increase of 1 tax unit will have





an impact on increasing taxes, which is 0.002 unit.

The profitability regression coefficient of 0.236 has a positive value, meaning that every 1 unit increase in profitability will have an impact on increasing profitability, which is 0.236 units.

Partial Test (T Test)

The t-test aims to see how big the effect of the independent variables individually on the dependent variable. The test criteria are, if $T_{count} < T_{table}$ with significance > 0.05 so H_0 is accepted: if $T_{count} > T_{table}$ with significance < 0.05 then H_a is accepted.

Table 6. T-Test

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error			
(Constant)	.958	1.846		.519	.607
LN_X1ST	.058	.145	.063	.400	.691
1 LN_X2PER	.074	.148	.078	.501	.619
LN_X3PAJAK	-.002	.300	-.001	-.007	.995
LN_X4PROFITABILITAS	.236	.140	.277	1.678	.101

The results of the t-test table show the value for probability 0.05 at the degrees of freedom $df=55$, which is 2.00404. The total value of the asset structure is 0.400 with a significant value of $0.691 > 0.05$. The value of $T_{count} < T_{table}$ ($0.400 < 2.00404$), then H_0 is accepted, meaning that the asset structure has no significant effect on the capital structure. The total

value of the asset structure is 0.400 with a significant value of $0.691 > 0.05$. The value of $T_{count} < T_{table}$ ($0.400 < 2.00404$), then H_0 is accepted, meaning that the asset structure has no significant effect on the capital structure. Obtained a total tax of 0.501 with a significant value of $0.995 > 0.05$. The value of $T_{count} < T_{table}$ ($-0.007 < 2.00404$), then H_0 is accepted, meaning that the tax does not have a significant effect on the capital structure.

Obtained a total profitability value of 0.501 with a significant value of $0.619 > 0.05$. The value of $T_{count} < T_{table}$ ($0.501 < 2.00404$), then H_0 is accepted, meaning that profitability has no significant effect on capital structure.

Table 7. Simultaneous Test (F Test)

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	11.821	4	2.955		
1 Residual	121.159	40	3.029	.976	.432 ^b
Total	132.980	44			

The f test has the aim of seeing whether all independent variables have a simultaneous effect on the dependent variable. The test criteria are if $F_{count} > F_{table}$, with a significance < 0.05 then H_a is accepted. Based on the f test table, it can be seen that the F_{count} value is 0.976 with a significant value of 0.432. At degrees of freedom 1 (df_1) = $k = 4$ and degrees of freedom 2 (df_2) = $n - k - 1 = 60 - 4 - 1 = 55$, where n is the number of samples, k is the number of independent variables. The value of $F_{(table)}$ with a significance value of 0.05 is 2.54. So the value of $F_{count} = 0.976 < F_{(table)} = 2.54$ then H_0 is accepted while H_a is rejected.





This means that the independent variables (asset structure, asset growth, taxes, profitability).

From the coefficient of determination test table above, it can be seen that the value of Adjusted R Square (R^2) is -0.002. It can be seen that the dependent variable of capital structure is explained by the independent variable (asset structure, asset growth, taxes, and profitability) which is 0.2%. While the rest, 99.8%, is explained by the dependent variable.

The results of partial data analysis show that the value of $T_{count} < T_{table}$ or $0.400 < 2.00404$ with a significant value of $0.691 > 0.05$. Thus, H_1 is rejected because the results of the study show that the asset structure does not have a significant effect on the capital structure of various industrial sector companies listed on the IDX in the 2017-2019 period. Athifah (2014) states that the capital structure and asset structure have a positive direction, meaning that the greater the structure of assets owned, the company's capital structure will increase and vice versa, it will make it easier for companies to obtain funds in the form of debt from outside parties because fixed assets can be used as company guarantees. to pay off debts and obtain loans to overcome the company's financial problems.

CONCLUSION

From the results of the research and discussion previously stated, it can be concluded that:

1. Partially, the asset structure does not have a significant influence on the capital structure of various industrial sector

companies listed on the IDX in the 2017-2019 period.

2. Partially, asset growth does not have a significant effect on the capital structure of various industrial sector companies listed on the IDX in the 2017-2019 period.

3. Partially, taxes do not have a significant effect on the capital structure of various industrial sector companies listed on the IDX in the 2017-2019 period.

4. Partially, profitability does not significantly influence the capital structure of various industrial sector companies listed on the IDX in the 2017-2019 period.

5. Simultaneously, asset structure, asset growth, taxes, and profitability have a significant effect on capital structure in various industrial sectors listed on the IDX in the 2017-2019 period

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