

The Influence of Capital Structure, Asset Growth, and Total Asset Turnover Against Return on Equity in Construction and Building Companies Listed in Bei 2016-2019

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Abstract

This study aims to determine the effect simultaneously and partially of capital structure, asset growth and TATO on Return on Equity. Data analysis used multiple linier regression analysis with SPSS application. Population in this research is the company of construction and building listed on BEI from 2016-2019. The research sample technique used purposive sampling with the results of 9 companies and 36 samples. The results showed partially, the regression coefficient value of the capital structure was 2.515 with a significance value of 0.017, so the capital structure had a significant effect on Return on Equity. And the TATO regression coefficient value is 3,479 with a significance value of 0.001. Then TATO has a significant effect on Return on Equity, while the regression coefficient value of Asset Growth is -0.459 with a significance value of 0.649. So Asset Growth has no significant effect on Return on Equity. For the research results simultaneously the significance value is 0.008, which means that Capital Structure, Asset Growth and TATO have an influence on Return on Equity.

Keywords :

Asset Growth, Capital Structure, Return On Equity, TATO

1. Introduction

The development of infrastructure in Indonesia, such as the construction of toll roads, highways, house buildings, tall buildings, stations, airstrips, parks and others, cannot be separated from construction and building service companies. The need for better and more equitable infrastructure has provided companies in this field with opportunities that are considered to continue. Construction and building service companies will also develop along with increasingly sophisticated technology and equipment. Even the Central Statistics Agency noted that in 2018 there were 1,551 large-scale construction companies in Indonesia. This certainly has an impact on Indonesia's economic development. As noted, the economic growth in the construction services sector in gross domestic product was 5.17% in the first quarter then increased to 5.78% in the third quarter of 2018. The increasing number of construction and building companies in Indonesia means that the companies are becoming more competitive. Every company is always looking for opportunities and opportunities to increase the value of its company. In addition, they see the company's financial performance as an evaluation material to increase company profits. A good company's financial performance will attract investors. Financial performance is one aspect of a fundamental assessment of a company's financial condition which can be done by analyzing financial ratios in a certain period, such as profitability ratios. Profitability ratios are used to see the company's ability to generate profits and measure the level of operational efficiency and efficiency in using its assets. One of the profitability ratios can be measured by Return on Equity.

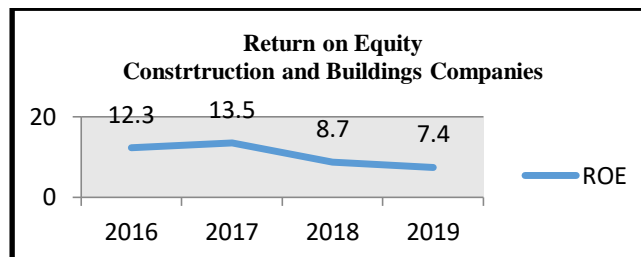


Figure 1. Return on Equity Construction and Buildings Companies

Source: Data processed, 2020

The graph above shows the average ROE development in construction and building companies listed on the IDX in 2016-2018. From the graph above it can be seen that the results vary. There was an increase from 2016 ROE of 12.3% to 2018 to 13.5%. However, in 2018 and 2019 it has decreased. This can be influenced by various factors.

Many things can affect the Return on Equity, such as the company's capital structure, growth in company assets and total asset turnover or total asset turnover.

The capital structure is a combination of debt and equity in the company's long-term financial structure. A good capital structure is a capital structure that optimizes the balance between risk and return, thereby increasing share prices. The capital structure can be calculated using the Debt to Equity (DER) ratio. In the research of Astuti, Rini. Lopian, Joyce. Rate (2016), it is stated that capital structure has a significant positive effect on profitability (ROE).

Asset growth is the change in total assets either in the form of increase or decrease in one period. Good company growth will attract investors to invest so that it will increase the share price and company value. In the research of Suryadi (2018) stated that Asset Growth has a positive and significant effect on Return on Equity.

Total Asset Turnover is a ratio to show a company's ability to use its assets for sales efficiency. In the research of Argananta (2017) it is stated that Total Asset Turnover has a significant effect on Return on Equity in a positive direction.

2. Literature Review

2.1. Capital Structure

Capital structure is related to the long-term spending of a company as measured by the ratio of long-term debt to its own capital used for company spending (Sudana, 2011). According to Weston (1996) capital structure is permanent financing consisting of long-term debt, preferred stock and shareholder capital. Hackbarth, D. & Mauer, (2011) stated that capital structure can influence investment policy. An investor invests his / her funds in the hope of getting a return or profit from the company that receives the funds.

$$\text{DER} = \frac{\text{Total of Debt}}{\text{Equity}}$$

2.2. Asset Growth

Asset growth or growth is the change (decrease or increase) in total assets owned by the company. Asset growth is calculated as the percentage change in assets at a certain time against the previous year (Saidi, 2004). Growth is the impact of the company's cash flow from operational changes caused by growth or decline in business volume (A, Helfert, 1997). Company growth is highly expected by internal and external parties of the company, because good growth signals the company's development. Prihantoro (2003) states that the higher the growth rate of the company, the greater the level of funding needed to finance expansion. The greater the need for funds in the future, the more likely it is for the company to withhold profits and not pay them out as dividends. Asset growth is the increase in the number of assets owned by the company from year to year. Asset growth is one of the objectives expected by internal parties and investors to have a good influence on the company so as to increase profits as well as company value

$$\text{Asset Growth} = \frac{\text{Total asset} - \text{Total asset (t-1)}}{\text{Total asset (t-1)}}$$

2.3. TATO

According to Syamsuddin (2007) The higher the ratio of Total Asset Turnover means the more efficient the use of all assets in generating sales. Total Asset Turnover is a measure of the number of times the company's total assets generate sales, this can also be interpreted that Total Assets Turnover measures the turnover of all assets owned by the company and measures how many sales are obtained from each rupiah of assets (Syamsudin, 2011).

$$\text{TATO} = \frac{\text{Sales}}{\sum \text{Total Aset}}$$

2.4. ROE

ROE is a ratio to see the return on equity (return on equity), which is the net profit for shareholders divided by the total shareholder equity. Brigham, Eugene F. dan Houston (2011).the company's ability to generate profit after tax using the company's own capital (Kasmir, 2015). The higher this ratio, the better, meaning that the position of the company owner is getting stronger. The most important ratio is

$$\text{ROE} = \frac{\text{Profit After Tax}}{\text{Equity}}$$

3. Conceptual Framework

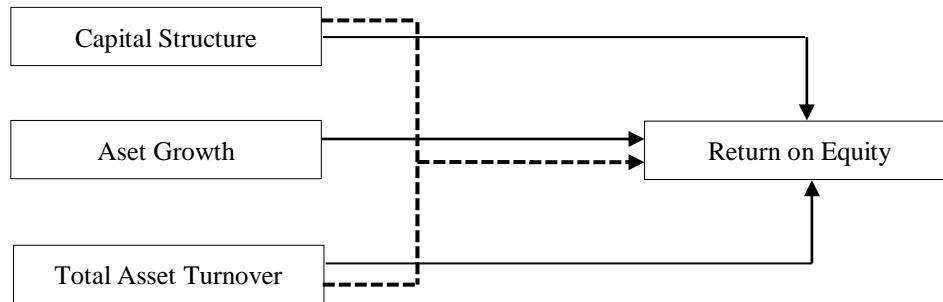


Figure 2. Conceptual Framework

4. Research Method

1) Research Approach

In this study using an associative research approach. The associative research approach according to Sugiyono (2017) is research that aims to determine the relationship between two or more variables.

2) Object of research

The object of this research is the Financial Statements of Construction and Building Companies listed on the Indonesia Stock Exchange from 2016-2019.

3) Population and Sample

The population of this research is construction and building companies listed on the Indonesia Stock Exchange 2016-2019. The sample collection uses purposive sampling technique.

4) Types, Sources, and Data Collection Techniques

The data used in this research is quantitative data. The data source in this study uses secondary data. Data collection techniques in this study using documentation techniques and literature study on the Indonesia Stock Exchange website (www.idx.co.id).

5) Data analysis technique

The data analysis used is multiple linear regression analysis with the SPSS application. Descriptive Analysis, Classical Assumption Test, and Hypothesis Test.

5. Result and Discussion

5.1. Classic Assumption Test

Normality Test

The normality test is used to test whether in a regression model, an independent variable or dependent variable or both have a normal or abnormal distribution

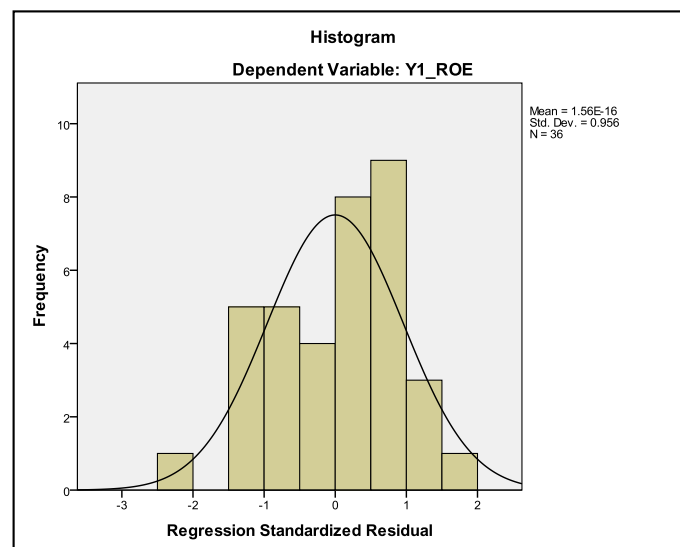


Figure 3. Histogram Graph

From the graph above, it can be seen that the data in the curved line and the highest point on the curved line are parallel to 0, this is in accordance with the provisions of the normality test, so it has met the assumption of normality.

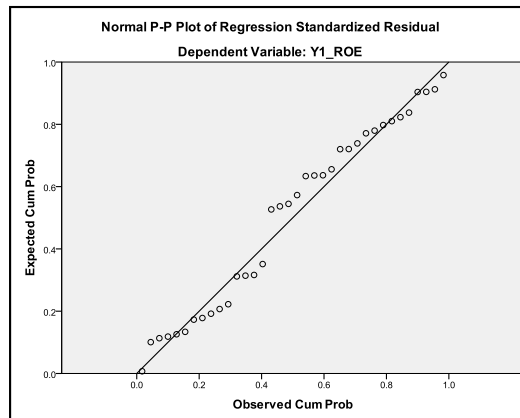


Figure 4. Chart P-Plot

It can be seen that the data is scattered around the diagonal lines and follows the direction of the diagonal lines on the histogram graph, this indicates that there is a normal distribution pattern. So it can be concluded that from the P-P Plot Graph, the regression model fulfills the normality assumption.

Table 1. One-Sample Kolmogorov-SmirnovOne-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		36
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	.05300139
Most Extreme Differences	Absolute	.112
	Positive	.093
	Negative	-.112
Kolmogorov-Smirnov Z		.671
Asymp. Sig. (2-tailed)		.759

From the Kolmogrov-Smirnov statistical data above, it can be seen that the significant value is 0.895, so it meets the classical assumptions because the significant value is above 0.05.

5.1.1. Heteroscedasticity Test

The heteroscedasticity test is used to determine whether or not there are deviations from the classic assumption of heteroscedasticity, namely the inequality of variants of the residuals for all observations in the regression model. Table 1.

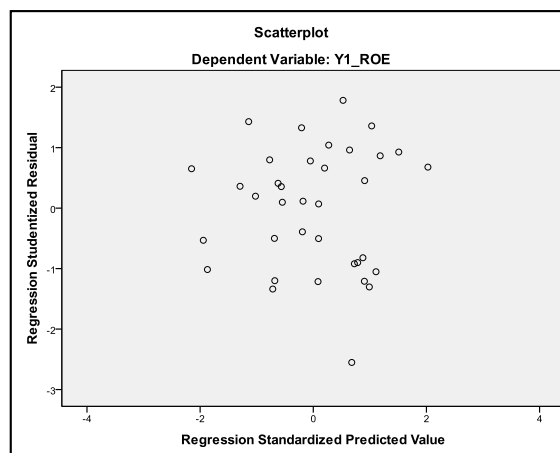


Figure 5. Heteroscedasticity Test

From the table above, it can be seen that the pattern is spread and none is close to the number 0 so there is no heteroscedasticity.

5.1.2. Multicollinearity Test

Multicollinearity testing aims to determine whether the regression model found a correlation between independent variables or independent variables.

Table 2. Multicollinearity Test
Coefficients^a

Model	Collinearity Statistics	Collinearity Statistics	
		Tolerance	VIF
1	X1_Struktur_Modal	.657	1.523
	X2_Pertumbuhan_Aset	.804	1.244
	X3_TATO	.706	1.416

a. Dependent Variable: Y1_ROE

From the test above, it can be seen that the tolerance value for Capital Structure, Asset Growth, and TATO of more than 0.10 has fulfilled the requirements. Then the VIF value is smaller than 10. Then the above data does not occur multicollinearity.

Autocorrelation Test

One way to identify autocorrelation is by looking at the Durbin Watson value, as follows:

- 1) If the DW value is below -2 it means that the autocorrelation is positive
- 2) If the DW value is below -2 to 2.5 it means there is no autocorrelation
- 3) If the DW value is above 2.5 it means that the autocorrelation is negative

Table 3. Autocorrelation Test

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.550 ^a	.302	.237	.055430	1.335

a. Predictors: (Constant), X3_TATO, X2_Pertumbuhan_Aset, X1_Struktur_Modal

b. Dependent Variable: Y1_ROE

From the results of the autocorrelation test above, it can be seen that the Durbin-Watson value is 1.335 so there is no autocorrelation.

5.2. Hypothesis Test

5.2.1. Multiple Linier Regression Test

Multiple linear regression functions to find the effect of two or more independent variables on the dependent variable.

Table 4. Multiple Linier Regression Test
Coefficients^a

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.		
					B	Std. Error
1	(Constant)	-.025	.041		-.620	.540
	X1_Struktur_Modal	.028	.011	.458	2.515	.017
	X2_Pertumbuhan_Aset	-.016	.035	-.076	-.459	.649
	X3_TATO	.129	.037	.611	3.479	.001

a. Dependent Variable: Y1_ROE

Based on the results of the multiple linear regression test above, the following equation is obtained:

$$Y = -0.025 + 0.028X_1 - 0.016X_2 + 0.129X_3 + e$$

So it can be explained that:

- 1) The regression coefficient value of the capital structure variable is 0.028. So if the capital structure increases by one percent, ROE will increase by 0.028 assuming other variables are constant.
- 2) The regression coefficient value of the asset growth variable is -0.016. So if the asset growth increases by one percent, the ROE will decrease by -0.016 assuming other variables are constant.

- 3) The regression coefficient value of the TATO variable is 0.037. So if the TATO increases by one percent, the ROE will increase by 0.037 assuming the other variables are constant.

5.2.2. Partial Signification Test (t)

The statistical t test is used to test how much influence the independent variable has on the dependent variable partially. If the Sig value <0.05, it means that the independent variable (x) partially affects the dependent variable.

Based on the test results above, it can be concluded that:

The regression coefficient value of the capital structure is 2.515 with a significance value of 0.017. Then the capital structure has a significant effect on Return on Equity. The value of the Asset Growth regression coefficient is -0.459 with a significance value of 0.649. Then Asset Growth does not have a significant effect on Return on Equity. TATO regression coefficient value of 3.479 with a significance value of 0.001. Then TATO has a significant effect on Return on Equity.

5.2.3. Simultaneous Significance Test (F)

The statistical F test shows whether all the independent variables included in the model have a joint influence on the dependent variable. If the Sig value <0.05, it means that the variables X1, X2, X3 simultaneously have an effect on the dependent variable ROE.

Table 5. Significance Test (F)

		ANOVA ^b				
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.043	3	.014	4.624	.008 ^a
	Residual	.098	32	.003		
	Total	.141	35			

a. Predictors: (Constant), X3_TATO, X2_Pertumbuhan_Aset, X1_Struktur_Modal

b. Dependent Variable: Y1_ROE

From the test results above, it can be seen that the significance value is 0.008, which means that capital structure, asset growth, and tattoos have an effect on Return on Equity simultaneously.

5.2.4. The coefficient of determination (R²)

Table 6. The coefficient of determination (R2)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.550 ^a	.302	.237	.055430

From the test results above, it can be seen that the Adjust R Square is 0.237 which means that ROE can be explained by the variables of Capital Structure, Asset Growth, and Tattoos by 23.7%. And the rest is influenced by other variables that are not studied.

6. Conclusion

- 1) The Effect of Capital Structure (X1) on Return on Equity (Y)

The results of the research show that the capital structure has a significant effect on Return on Equity because the regression coefficient value of the capital structure is 2.515.

- 2) The Effect of Asset Growth (X2) on Return on Equity (Y)

The results of the research show that Asset Growth has no significant effect on Return on Equity because the regression coefficient value of the capital structure is -0.459.

- 3) Effect of TATO (X3) on Return on Equity (Y)

The results of the research show that TATO has a significant effect on Return on Equity because the regression coefficient value of the capital structure is 3.479.

- 4) The Influence of Capital Structure, Asset Growth, and Tattoos on Return on Equity

The results of the research show that capital structure, asset growth, and tattoos have a simultaneous effect on Return on Equity because the significance value is 0.008.

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