EFFECT OF *FS, SG, AS* AND *NDTS* TO CAPITAL STRUCTURE ON COMPANY PROPERTY AND REAL ESTATE

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Abstract

Background : Between 2016 and 2020, the population used was 46 listed property and real estate company on the IDX. The sample selection technique is technique purposive sampling and obtained as much 14 sample company multiplied with five year, produce 70 units analysis. Research tested with use linear regression analysis multiple. **Method :** The data collection method in this research is document. **Result :** This research proves that Firm Size partially has no effect on the Capital Structure of property and real estate companies. This is due to personnel errors in the company in making decisions so that it becomes a wrong step that can be fatal in managing company funds or capital **Conclusion :** Firm Size, Sales Growth, Asset Structure, and Non Debt Tax Shield simultaneously have a significant positive effect on the Capital Structure of property and real estate companies listed on the IDX in 2016-2020.

Keywords: Firm Size, Sales Growth, Asset Structure, Non Debt Tax Shield, Capital Structure (Debt to Equity Ratio)

INTRODUCTION

The competitive business zone is a determining factor for the company's development. One such concern is whether the corporation will be able to turn a profit in the near future. However, the company will likely need upfront funds to finance internal operations. Internal and external financial decisions affect the long-term sustainability of the organization[1]. A company's capital structure changes as it makes substantial and possibly risky fundraising and financial decisions. Choosing the wrong path for a business can cause problems and in the worst case, end up shutting down. The inability to make sound financial decisions will negatively damage the company's capital structure[2][5][6].

Researchers are interested in conducting an in-depth study of property and real estate companies because these sector companies require large amounts of money and costs, as well as strict supervision of fund management, funding options, and financing procedures. In some cases, companies that went bankrupt occurred because they were unable to pay off debts that were increasing and growing. However, if the company has the ability to control its finances well, then the property and real estate sector is a fairly promising business opportunity. This is because the development is increasing, but the available land is increasingly limited. If the property price is resold, the price will not fall so much and will even increase[3][4].

Firm size is an illustration of the size of a company where large companies will more easily attract investors to invest or to obtain loans because of their established reputation. Determination of the size of a company seen from total assets and total sales. The problem is that if the reputation of a small company declines, it will affect investor interest and capital structure[7]. Sales growth is an important point in the development of a company. Sales growth will result in regular profit increases for the company. This shows that the company's sales activities are going well so that it can invite the attention of investors to invest in a company. Recent research has found that large-volume firms are more likely to use debt in a structure with the expectation that increasing output will increase profitability and make it easier to repay debt. The problem is that if the value of sales decreases, it will have an impact on the capital structure of the company[9][10]. capital structure (DER) is the ratio of debt to equity in the company's financing structure that reflects the ability of the organization's capital to pay its commitments[11][12][13].

RESEARCH METHODS

The data collection method in this research is document. The classical assumption test aims to see whether the data used in the study meets the requirements before further testing or analysis with multiple regression models is carried out.

Hypothesis testing using multiple linear regression to test the effect of independent variables on the dependent variable. Multiple linear regression is defined mathematically:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + e$$

Figure 1. formula

RESULTS AND DISCUSSION

The following data is information that describes the amount of data, the lowest value, the highest value, the average, standard deviation, classical assumptions to the hypothesis.

Data parsing:

1. Firm Size data is 70, the minimum data is 23,759, the maximum data is 31,740, the mean is 29.03859 and the data deviation is 2.007570.

2. Sales Growth data is 70, the minimum data is -0.522, the maximum data is 1.558, the mean is 0.00044 and the data deviation is 0.286306.

3. The Data Asset Structure is 70, the minimum data is 0.005, the maximum data is 0.649, the mean is 0.05748 and the data deviation is 0.087190.

4. Non Debt Tax Shield data is 70, the minimum data is 0.004, the maximum data is 0.152, the mean is 0.04265 and the data deviation is 0.040871.

5. Capital Structure data is 70, the minimum data is 0.043, the maximum data is 1.743, the mean is 0.67275 and the data deviation is 0.478729.

The findings of the Kolmogorov-Smirnov test show that:

One-Sample Kolmogorov-Smirnov Test		Unstandardized Residual
N		28
Normal Parameters[a,b]	Mean	.00000000
	Std. Deviation	0.24224174
Most Extreme Differences	Absolute	0.107
	Positive	0.080
	Negative	-0.107
Test Statistic		0.107
Asymp. Sig. (2-tailed)		.200[c,d]

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.

Figure 2. Kolmogorov-Smirnov test

Asymp.Sig (2-tailed) was 0.200 according to the findings of the normality test. Because the value is > 0.05 then the data is normally distributed. Tolerance and VIF numbers indicate the test. If tolerance > 0.10 and VIF > 10, then there is no relationship between the independent variables. There is no multicollinearity because the four independent variables meet the tolerance and VIF requirements.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.621[a]	.386	.279	.26226	1.426

a. Predictors: (Constant), SQRT_NON DEBT TAX SHIELD, SQRT_SALES GROWTH, SQRT_FIRM SIZE, SQRT_ASSET STRUCTURE

b. Dependent Variable: SQRT_CAPITAL STRUCTURE

Figure 3. Autocorrelation Test

The first test used the Durbin - Watson approach with du < dw < 4-du. Based on the results of the DW test table obtained, the Durbin-Watson value was 1.426 so that the results were 1.7351 < 1.426 < 2.2649. This means that there is an autocorrelation. So, autocorrelation test can be done by run test. The results of the autocorrelation test using the run test method showed sig, 0.178 > 0.05 which means there is no autocorrelation.
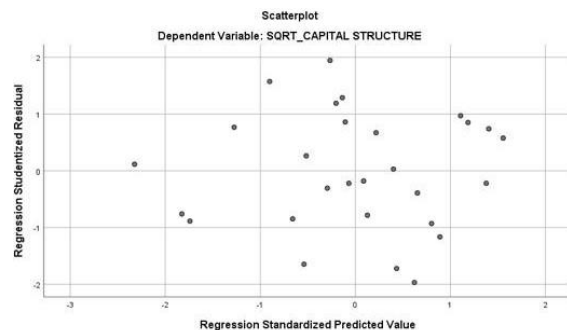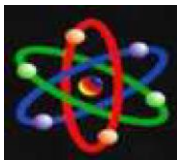

Figure 4. Scatterplot

The results of the scatterplot graph test above show that there is no heteroscedasticity because the points are

randomly distributed. Multiple linear regression analysis was conducted to determine the effect of firm size, sales growth, asset structure, and non-debt tax shield on the capital structure of property and real estate companies listed on the Indonesia Stock Exchange in 2016-2020.

The linear equation for the effect of firm size, sales growth, asset structure, and non-debt tax sheild on the capital structure of property and real estate companies listed on the Indonesia Stock Exchange in 2016-2020 is:

Y = 3.747 – 0.490 Firm Size – 0.328 Sales Growth + 1.681 Asset Structure – 2.589 Non Debt Tax Shield

The coefficients in the multiple linear regression equation are:

a. Constant value (a) of 3,747 units means that firm size, sales growth, asset structure, and non-debt tax shield are considered constant, so the capital structure conditions for property and real estate companies listed on the Indonesia Stock Exchange in 2016-2020 are 3,747 units.

b. Sales growth variable regression coefficient (b1) is -0.490 units. This proves that an increase in one unit of sales growth will cause a decrease in the condition of the capital structure of property and real estate companies listed on the IDX in 2016-2020 of -0.490 units.

c. The regression coefficient for firm size variable (b2) is -0.328 units. This proves that an increase in one unit of firm size will cause a decrease in one unit of capital structure conditions in property and real estate companies listed on the IDX in 2016-2020 of -0.328 units.

d. The regression coefficient of the asset structure variable (b3) is 1,681 units. This proves that an increase in one unit of asset structure will lead to an increase in the condition of the capital structure of property and real estate companies listed on the Indonesia Stock Exchange in 2016-2020 by 1,681 units.

e. The non-debt tax shield variable regression coefficient (b4) is -2.589 units. This proves that an increase in one unit of non-debt tax shield will cause a decrease in the condition of the capital structure of property and real estate companies listed on the IDX in 2016-2020 by -2.589 units.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.621[a]	.386	.279	.26246	1.426

a. Predictors: (Constant), SQRT_NON DEBT TAX SHIELD, SQRT_SALES GROWTH, SQRT_FIRM SIZE, SQRT_ASSET STRUCTURE

b. Dependent Variable: SQRT_CAPITAL STRUCTURE

Figure 5. Coefficient of Determination (R²)

The table shows the value of the coefficient of determination, namely the adjusted R Square is 0.279, so the influence of firm size, sales growth, asset structure, and non-debt tax shield in predicting capital structure conditions in property and real estate companies listed on the IDX in 2016- 2020 is worth 27.90% in addition to leaving 72.10% is influenced by other factors not examined in this study.

Simultaneous Hypothesis Testing (F Test)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.997	4	.249	3.617	.020[b]
	Residual	1.584	23	.069		
	Total	2.581	27			

a. Dependent Variable: SQRT_CAPITAL STRUCTURE

b. Predictors: (Constant), SQRT_NON DEBT TAX SHIELD, SQRT_SALES GROWTH, SQRT_FIRM SIZE, SQRT_ASSET STRUCTURE

Figure 6. F-Test

F count = 3.617, sig = 0.020 and F table figure at 95% confidence level (α = 0.05) of 2.51 so that F count > F table is 3.617 > 2.51 with a significance of 0.02 < 0.05. This proves that firm size, sales growth, asset structure, and non-debt tax shield have a significant positive effect on the capital structure of property and real estate companies listed on the Indonesia Stock Exchange in 2016-2020.

Partial Hypothesis Testing (Test Statistics t)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.747	1.362		2.754	0.011
	SQRT_FIRM SIZE	-0.490	0.253	-0.340	-1.938	0.065
	SQRT_SALES GROWTH	-0.328	0.220	-0.276	-1.487	0.151
	SQRT_ASSET STRUCTURE	1.682	0.714	0.462	2.354	0.028
	SQRT_NON DEBT TAX SHIELD	-2.589	0.791	-0.602	-3.273	0.003

a. Dependent Variable: SQRT_CAPITAL STRUCTURE

Figure 7. T-Test

The t-test is one by one the independent variable on the dependent variable.

Based on the above output results obtained:

1. Firm Size variable with t count < t table (-1.938 < 1.99656) and significant value 0.065 > 0.05 then partially firm size does not affect the capital structure of property and real estate companies.

2. Sales Growth variable with a value of t count < t table (-1.487 < 1.99656) and a significant value of 0.151 > 0.05 then partially sales growth has no effect on the capital structure of property and real estate companies.

3. Variable Asset Structure with a value of t arithmetic > t table (2.354 > 1.99656) and a significant value of 0.028 <0.05,

partially asset structure has a significant positive effect on the capital structure of property and real estate companies.

4. Non Debt Tax Shield variable with t count < t table (-3.273 > 1.99656) and significant value 0.003 < 0.05, partially non-debt tax shield has a significant negative effect on capital structure in property and real estate companies.

This research proves that Firm Size partially has no effect on the Capital Structure of property and real estate companies. This is due to personnel errors in the company in making decisions so that it becomes a wrong step that can be fatal in managing company funds or capital. The results of this study agree with the research of Muhammad Effendi, Kartika Hendra TS, Suhendro (2021) which states that company size has no effect on capital structure. However, contrary to research by Ni Luh Ayu Amanda Mas Juliantik et al. (2016) who stated that company size had a positive and significant effect on capital structure.

This research proves that Sales Growth partially has no effect on the Capital Structure of property and real estate companies. Sales growth is not equivalent to an increase in the profit of a company if the company's expenses and costs are also higher. Therefore, good sales growth does not guarantee a company can increase its capital.

The results of this research agree with the research of Intan Dwi Cahyani & Yuyun Isbanah (2019) which states that sales growth has no significant effect on capital structure. However, this is contradictory to the results of Andika Pramukti's research (2019) which states

that sales growth has a positive & significant effect on capital structure.

This research proves that the Asset Structure partially has a significant positive effect on the Capital Structure of property and real estate companies. This is because companies with large fixed assets will find it easier to get loans from outside that can be used to support the company's operational activities.

The results of this study agree with the research of Angrita Denziana & Eilien Delicia Yunggo (2017) which states that asset structure has a positive and significant effect on capital structure. However, this is contrary to the results of Andi Kartika's (2016) research which details that the asset structure does not affect the capital structure.

This research proves that the Non Debt Tax Shield partially has a significant negative effect on the Capital Structure of property and real estate companies listed on the IDX in 2016-2020. This is because if a company gets a larger tax deduction, it can save a little cost so that the money can be used as capital to increase the company's operational activities.

The results of this study are in line with the research of Ni Kadek Tika Sukma Dewi & I Made Dana (2017) which says that the non-debt tax shield has a significant negative effect on capital structure. However, this contradicts the results of research by Dwi Sundari & Joni Susilowibowo (2016) which states that the non-debt tax shield has no effect on capital structure.

This research proves that the Non Debt Tax Shield partially has a significant negative effect on the Capital Structure of property and real estate companies listed

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CONCLUSION

1. Firm Size, partially has no effect on the Capital Structure of property and real estate companies listed on the IDX in 2016-2020.

2. Sales Growth, partially has no effect on the Capital Structure of property and real estate companies listed on the IDX in 2016-2020.

3. Asset Structure partially has a significant positive effect on the Capital Structure of property and real estate companies listed on the IDX in 2016-2020.

4. Non Debt Tax Shield, partially has a significant negative effect on the Capital Structure of property and real estate companies listed on the IDX in 2016-2020.

5. Firm Size, Sales Growth, Asset Structure, and Non Debt Tax Shield simultaneously have a significant positive effect on the Capital Structure of property and real estate companies listed on the IDX in 2016-2020.

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