

THE EFFECT OF PROFITABILITY, LIQUIDITY, COMPANY SIZE ON CAPITAL STRUCTURE (STUDY ON REAL ESTATE AND PROPERTY COMPANIES) LISTED ON THE INDONESIAN STOCK EXCHANGE (BEI) FOR THE PERIOD (2020-2022)

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ABSTRACT

This research delves into the intricate dynamics of capital structure decisions within the context of real estate and property companies listed on the Indonesia Stock Exchange (IDX) during the period spanning from 2020 to 2022. The study aims to scrutinize the interplay between profitability, liquidity, and firm size, and their impact on the capital structure choices made by these companies. Employing the panel regression analysis method, this research endeavors to unveil the nuanced relationships between these key variables. Drawing data from the annual financial reports of the sampled companies sourced from the official IDX website, this study undertakes a rigorous empirical investigation. By employing a panel regression framework, it seeks to provide a comprehensive understanding of how profitability, liquidity, and firm size collectively influence the capital structure decisions of real estate and property firms in Indonesia. The findings of this research are anticipated to offer valuable insights to a myriad of stakeholders including investors, policymakers, and corporate executives. Understanding the determinants of capital structure within the real estate and property sector is crucial for making informed investment decisions, formulating effective regulatory policies, and devising optimal financing strategies. Moreover, the empirical evidence generated by this study could potentially contribute to the existing body of knowledge in corporate finance and serve as a foundation for future research endeavors in this domain.

INTRODUCTION

The Indonesia Stock Exchange (IDX) is an institution or market where trading of shares and other financial instruments takes place in Indonesia. The IDX has an important role in facilitating meetings between investors who want to buy or sell shares of companies listed on the stock exchange. Increased activity in the real estate and property industry sector can be used as an indication of improving or reviving economic activity. In other words, activity in the real estate and property industry sector can be used as an indicator of how active economic activity in general is taking place. However, the development of the real estate and property sector industry needs to be examined carefully because it can have an impact on two different sides. The real estate and property industry sector is a sector with

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characteristics that are difficult to predict and high risk. Difficult to predict here means that the ups and downs of the real estate and property industry sector have large gaps, namely when there is high economic growth, the real estate and property industry experiences an increase and tends to exceed the estimated target. On the other hand, when economic growth declines, the real estate and property sector will quickly experience a fairly specific decline. The real estate and property sector is one of the sectors significantly affected by this global crisis. With banks temporarily suspending lending to the real estate and property sector, developers are experiencing difficulties in sourcing funding. High bank interest rates have also caused sales in this sector to decline, due to the higher interest rates that must be charged to consumers. This phenomenon will indirectly have an impact on the funding policy that the company will take. Funding policy issues become the spearhead in the business world and the economy. Even to get out of this economic crisis, the real sector must always be mobilized to stimulate economic growth. Many obstacles are experienced by the business world, and one of them is funding problems. One of the important decisions faced by managers, especially financial managers in relation to the continuity of company operations is funding decisions or capital structure decisions. If the company in meeting its capital needs is increasing while the funds owned are limited, then the company has no other choice but to use funds from outside, namely either in the form of debt or by issuing new shares to meet its capital needs. In other words, the company does debt financing. Furthermore, researchers use the Property and Real Estate Industry for the object of this research. Where the Property and Real Estate Industry includes industries that operate in the field of building construction and public facilities. Debt policy in the capital structure is a strategy used by companies to manage how they finance their operations and projects. It involves decisions about how much debt to take, the type of debt used (for example, long-term debt or short debt), and its effect on the ratio between debt and equity.

The real estate business cycle is a pattern of change in the property market that includes several phases that repeat sequentially. These phases reflect changes in prices, demand, supply, and activity in the real estate market. High bank interest rates have also resulted in declining sales in this sector, as higher interest rates are charged to consumers. A good capital market condition is also the main goal of the company in increasing the value of the company through increasing the prosperity of the owner or shareholder. The purpose of capital structure is to unite the sources of funds used by the company to maximize the value of the company by increasing the share price, minimizing the cost of capital and balancing the rate of return and risk. Capital structure is measured using three indicators, namely leverage, debt to equity, and collateralizable assets. Leverage reflects the use of funding sources derived from long-term debt (foreign capital) which creates a fixed burden for the company, such as interest expense. Capital structure is the funding mix of long-term debt and equity (Brealey et al. 2011: 600). Capital structure is the company's way to form the right side of the balance sheet consisting of capital and debt (Zani et al. 2013). The capital structure consists of short-term funding, long-term funding, and equity. Short-term and long-term debt can be obtained from external parties. Long-term debt will be used by the company to finance capital investment. Mortgage debt and bonds are examples of long-term debt. Mortgage debt can also be called secured debt. Mortgage debt is debt that is guaranteed by the company's assets. Examples of company assets that can be used as collateral for debt are

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land and buildings. Based on previous research, Profitability and Liquidity variables have a negative influence on capital structure. In addition, in the research of Fajrida (2018) and Zulkarnain (2020) also explained that Profitability has a positive influence on the capital structure of a company. Meanwhile, on the Liquidity variable, research by Pratiwi et al. (2019), Rosmaneliana, (2021), and Wulandari & Artini, (2019) show that this variable has a positive influence on capital structure.

Capital Structure

Capital structure is a funding mix of long-term debt and equity (Brealey et al. 2011: 600). Capital structure is the company's way to form the right side of the balance sheet consisting of capital and debt (Zani et al. 2013). The capital structure consists of short-term funding, long-term funding, and equity. Short-term and long-term debt can be obtained from external parties. Long-term debt will be used by the company to finance capital investment.

Capital Structure Measurement

The composition of the company's debt and capital in the capital structure can be measured based on the debt to equity ratio (Ross et al., 2010). 2010. The ratio formula is described as follows:

$$\text{Debt to Equity Ratio (DER)} = \frac{\text{Total Debt}}{\text{Equity}} \times 100\%$$

Total debt above includes short-term debt and long-term debt. Total capital includes all of the company's capital in the form of common stock, preferred stock and retained earnings. Debt and capital funding are distinguished as follows (Ross et al. 2010: 472):

1. Debt does not affect shareholders' interests in the company.
2. Debt interest costs are used as tax deductible costs (tax shield).
3. Unpaid debt is a company obligation.
4. Investment decision is the manager's decision to form all the assets needed by the company.

Profitability

Profitability will show the balance of income and the company's ability to generate profits at various operating levels so that this ratio will reflect the effectiveness and success of overall management (Wibowo and Wartini, 2012). Profitability can be measured using return on assets (ROA), which shows the ability of all funds invested in assets to generate profits which is the ratio between net profit after tax and total assets. ROA is used to measure the effectiveness of the company in generating profits by utilizing its assets (Nugrahan and Sampurno, 2012). The ROA formula is as follows:

$$\text{Return on Assets} = \frac{\text{Laba Bersih setelah Pajak}}{\text{Total Aset}} \times 100\%$$

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Liquidity

According to Weston and Copeland (1999: 226) generally the first concern of a financial analyst is liquidity, namely whether the company is able to fulfill its obligations that will come due. Liquidity can be measured using the current ratio, which is calculated by dividing current assets by current liabilities. This ratio shows how far current liabilities are covered by assets that are expected to be converted into cash in the near future (Brigham and Houston, 2014: 134). The following is the Liquidity formula that uses the current ratio.

$$\text{Current ratio} = \frac{\text{Aktiva lancar}}{\text{Kewajiban lancar}}$$

Factors Affecting Liquidity

1. Cost Of External Financing
2. Current And Future Invesment opportunities
3. Transactions Demand for liquidity
4. Cash Flow Uncertainty

Company Size

According to Devi et al (2017), company size is the size or amount of assets owned by the company. The greater the total assets of the company, the greater the size of the company. Company size describes the size of a company which is indicated by the total assets owned, total sales, average total sales, and average assets (Haryanto, 2014). Company size measurement Company size is measured by the natural logarithm (ln) of total assets (Yulianto et al, 2015). The use of natural logs here is intended to reduce excessive data fluctuations so as to reduce the skewness of distribution and minimize the standard error of the regression coefficient (Harjanti and Tandelilin, 2007). The company size variable is measured by the Natural Logarithm (Ln) of total assets. This is because the amount of total assets of each company is different and even has a large difference, so it can cause extreme values. To avoid this abnormal data, the total asset data needs to be Ln. Company size is the size or size of an asset owned by the company. Company size is measured by the natural logarithm of total assets (Margaretha and Ramadhan, 2010), which is formulated as follows:

$$\text{Ukuran Perusahaan} = \text{Ln (Total Aset)}$$

METHODS

This research is a type of quantitative research where the data used is secondary data sourced from the financial statements of real estate and property companies listed on the Indonesia Stock Exchange (IDX) from 2020 to 2022. The required data includes the company's financial statements or annual reports. The data is obtained from the official website of the Indonesia Stock Exchange at <http://www.idx.co.id>.

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DISCUSSION

The Effect of Profitability, Liquidity, Company Size on Capital Structure (Study on Real Estate and Property Companies) Listed on the Indonesia Stock Exchange (IDX) Period (2020-2022)

Based on the results of Anova regression test research and F-test with the calculated F value which has a significance value of $0.001 < 0.05$. It can be seen that simultaneously or simultaneously Return On Assets (ROA), Current Ratio (CR), Company Size (LN) have or have a significant influence on capital structure.

Effect of Return On Assets (ROA) on Capital Structure

Based on the result of t-test on Return On Assets (X1) variable, it shows that the sig result obtained is $0.083 > 0.05$, then partially Return On Assets has no significant influence on capital structure for the next one year period.

Effect of Current Ratio (CR) on Capital Structure

Based on the results of the t-test on the Current Ratio (X2) variable, it shows a sig value of $0.071 > 0.05$, so partially Current Ratio has no significant effect on the capital structure for the next one year period.

Effect of Company Size on Capital Structure

Based on the results of the t-test on the variable Company Size (X3), shows the results of the sig value obtained of $0.081 > 0.05$. then partially Company Size has no significant effect on the capital structure for the next one year period.

RESULT

Normality Test

The normal distribution of residuals is the Kolmogorov-Smirno (K-S) non-parametric statistical test. The way to detect it is by looking at the residual significance value, if the significance is more than 0.05 then the residuals are normally distributed (Imam Ghazali, 2011).

Table 1. Normality Test Results With On-Sample Kolmogorov-Smirnov Test
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		30
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	.36055170
Most Extreme Differences	Absolute	.114
	Positive	.114
	Negative	-.111
Test Statistic		.114
Asymp. Sig. (2-tailed) ^c		.200 ^d
	Sig.	.404

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Monte Carlo Sig. (2-tailed) ^e	99% Confidence Interval	Lower Bound	.391
		Upper Bound	.416

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

e. Lilliefors' method based on 10000 Monte Carlo samples with starting seed 2000000.

It can be seen in the data table that the value of Asymp Sig. (2.tailed) of 0.200 > 0.05, then the residuals are normally distributed.

Multicollinearity Test

Table 2. Multicollinearity Test Results

Coefficients ^a			
Model		Collinearity Statistics	
		Tolerance	VIF
1	X1	.995	1.005
	X2	.556	1.800
	X3	.555	1.801

a. Dependent Variable: Y

It can be seen in the data table obtained, X1 has a Tolerance value of 0.995 and VIF of 1.005, X2 has a Tolerance value of 0.556 and VIF of 1.800, X3 has a Tolerance value of 0.555 and VIF of 1.801. So it can be concluded that the data does not occur symptoms of multicollinearity, because the three variables have a Tolerance value greater than 0.100 and VIF less than 10.00.

Heteroscedasticity Test

According to Ghozali (2016) the heteroscedasticity test is used to test whether in a regression model there is an inequality of variance from one study to another. The Glejser test is used to determine the presence or absence of heteroscedasticity, with the following conditions:

1. If the significance value > $\alpha = 0.05$, it can be concluded that there is no heteroscedasticity.
2. If the significance value < $\alpha = 0.05$, it can be concluded that there is heteroscedasticity.

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Table 3. Heteroscedasticity Test Results

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.732	.943		.777	.444
	X1	1.333	3.603	.065	.370	.714
	X2	-.024	.011	-.491	-2.080	.047
	X3	-.013	.031	-.099	-.418	.679

a. Dependent Variable: ABS_RES

It can be seen in the data table obtained, X1 has a Sig value of 0.444, X2 has a Sig value of 0.714, X3 has a Sig value of 0.679. So it can be concluded that the three independent variables used have a Sig value greater than 0.05. So it can be interpreted that the data does not occur symptoms of heteroscedasticity, or the assumptions of the heteroscedasticity test using the Glajser method have been met.

Multiple Linear Regression Test

T test

To test the hypothesis partially, the t statistical test is used, which can be used to determine how far the influence of one independent variable individually in explaining the variation in the dependent variable (Ghozali, 2005). If the significance probability value <0.05, then this means that an independent variable is a significant explanatory of the dependent variable.

Table 4. T-Test Results

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.156	1.664		-1.296	.206
	Return On Assets	11.427	6.337	.254	1.803	.083
	Current Ratio	-.038	.020	-.354	-1.880	.071
	Ukuran perusahaan	.099	.055	.342	1.817	.081

a. Dependent Variable: Debt to Equity Ratio

Based on the table, it can be seen that the sig value on Return On Assets (X1) is 0.083, Current Ratio (X2) is 0.071, Company Size (X3) is 0.081, where the three values are greater than 0.05. So it can be concluded that the results of the t test above have no effect on variable X on variable Y.

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F test

The F statistical test is used to be able to determine whether all independent variables included in the regression model have a joint (simultaneous) influence on the dependent variable (Ghozali, 2005). If the significance probability value < 0.05 , then this explains that the independent variables can jointly influence the dependent variable.

Table 5. F Test Results

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.595	3	1.198	8.264	.001 ^b
	Residual	3.770	26	.145		
	Total	7.365	29			

a. Dependent Variable: Debt to Equity Ratio

b. Predictors: (Constant), Ukuran perusahaan, Return On Assets , Current Ratio

Based on the table above, it can be seen that this equation model has a sig level value of 0.001 smaller than 0.05. So it can be concluded that there is a joint influence of the Return On Assets (X1), Current Ratio (X2), Company Size (X3) variables on the Capital Structure (Y) variable.

CONCLUSION

Based on the data analysis and discussion that has been carried out in the previous chapter, the following conclusions can be drawn: Partially, Return on Asset (ROA) does not affect the capital structure for the next one year period. Partially, Current Ratio (CR) has no effect on the capital structure for the next one year period. Partially, Company Size has no effect on Capital Structure for the next one year period. Simultaneously Return on Asset (ROA), Current Ratio (CR), company size have influence on capital structure. This is because the significance value in the F test of 0.001 is smaller than the sig value of 0.05.

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