CAPITAL STRUCTURE, LIQUIDITY, AND FIRM SIZE AS DETERMINANTS OF PROFITABILITY: EVIDENCE FROM PROPERTY AND REAL ESTATE COMPANIES ON THE INDONESIA STOCK EXCHANGE, 2020–2023

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Abstract: The property and real estate sector in Indonesia has great growth potential and is a prime choice for investors. However, this sector faces economic challenges and intense competition, making profitability an important indicator for attracting investment. This study aims to determine the effect of capital structure, liquidity, and company size on profitability in property and real estate companies listed on the Indonesia Stock Exchange (IDX) for the period 2020-2023. The research population includes all property and real estate companies listed on the IDX during that period, with purposive sampling techniques resulting in 20 companies meeting the criteria. The data analysis technique used is multiple linear regression. The results of the study indicate that capital structure has a negative and significant effect on profitability, liquidity has a positive and significant effect, while company size does not have a significant effect on Profitability.

Keywords: capital structure, liquidity, company size, profitability

INTRODUCTION

The property and real estate sector in Indonesia has great growth potential and is a top choice for investors. This sector is able to employ many people and influence various other economic sectors. Along with economic growth, the increasing demand for housing, offices, hotels, and shopping centers shows growth in this sector. The property and real estate sector in Indonesia has a lot of potential, but it faces many problems, such as fierce competition and economic changes. Profitability is an important indicator for assessing business performance in this industry because the level of profit generated is able to attract financial specialists to invest capital.

Profitability is the most important factor that a company must consider because it will influence the decisions made by financial specialists regarding what investments they will make. Companies that are able to generate high profitability can attract financial specialists to invest.

Capital structure decisions are components that affect profitability, including sales stability, asset structure, use of operations, growth rate, tax profitability, control, management attitude, lender attitude, market conditions, internal company

conditions, and financial flexibility (Brigham & Houston, 2011). In this study, the modular structure variable was measured using the Debt to Equity Ratio (DER).

Liquidity is another factor that affects profitability. A company's ability to meet its obligations in the short term is called liquidity. A company's liquidity ratio determines its ability to meet its short-term obligations (Kasmir, 2019). If a business has a high liquidity value, financial specialists may want to invest because this indicates that the business is able to pay its obligations in the near future when they fall due. The liquidity variable in this study was calculated using the CR (Current Ratio) ratio.

Company size is an additional factor that affects profitability. According to Brigham and Houston (2010), company size refers to how large or small a company is, as indicated or assessed by the amount of assets, sales, tax expenses, asset value, or market value (Rivera et al., 2021). Basyaib (2007) states that company size, or company estimation, is a scale that can be classified as large or small in various ways, such as income size, adding assets, or adding capital. An increase in revenue size associated with adding capital and assets will indicate a stronger company (Rivera et al., 2021). For the purposes of this study, the company size variable was calculated using LN (Total Assets).

This research was conducted on property and real estate companies that are officially listed on the Indonesia Stock Exchange. The information and basis for this research were obtained through direct access to the official website of the Indonesia Stock Exchange, known as IDX, using the official website www.idx.co.id.

Table 1

Average Values of DER, CR, TA, and ROA

Property and Real Estate Companies 2020-2023

Year	DER	CR	TA (in millions)	ROA
2020	59%	22.83 x	1,025.83	3.75%
2021	55%	31.16 x	1,048.16	3.84%
2022	59%	35.69 x	1,100.36	4.65%
2023	58%	18.71 x	1,125.07	4.57%

Source: processed data (2024)

Based on Table 1, the average capital structure from 2020 to 2023 shows a relatively stable debt-to-equity ratio of between 55% and 59%. The company's DER stood at 59% in 2020, fell slightly to 55% in 2021, rose again to 59% in 2022, and fell slightly to 58% in 2023. This shows that the company's capital structure is stable, with slight fluctuations from year to year. Liquidity fluctuated, increasing from 22.83x in 2020 to 31.16x in 2021 and 35.69x in 2022. However, in 2023, the value dropped dramatically to 18.71x. Company size increased from 1,025.83 million in 2020 to 1,125.07 million in 2023, indicating slow asset growth during this period. Profitability

increased from 3.75% in 2020 to 3.84% in 2021, then increased rapidly to 4.65% in 2022, and decreased slightly to 4.57% in 2023.

LITERATURE

Agency Theory

Agency theory is defined by Jensen and Meckling (1976) as a contract between shareholders who invite agents to perform certain tasks for their benefit, such as giving them the authority to make decisions. Both agents and principals have their own interests, which cause agency conflicts and agency costs. Most agency conflicts occur because of differences between the agent's decisions and the decisions that would benefit the principal, resulting in agency costs known as residual losses.

Capital Structure

Sudana (2015) states that a company's capital structure is linked to long-term financing. This can be seen from a comparison of equity capital with long-term debt. One of the most important financial provisions for a business is determining its capital structure, which can affect how the company achieves its financial management objectives. If the company were to be liquidated at that time, the capital structure would indicate whether the company could successfully settle all its financial obligations. Thus, the capital structure indicates the success of a company in its ability to cover current and non-current liabilities. The capital structure is very important for a company because its condition can affect the financial position of a company, which in turn affects profitability.

Liquidity

Kasmir (2019: 129) states that liquidity is a ratio that describes a company's ability to meet short-term debts, especially those that are due. Kasmir also states that the liquidity ratio is a ratio used to measure a company's liquidity. This is done by comparing balance sheet components, namely current assets, with total short-term debt. Liquidity issues relate to a company's ability to meet its short-term financial obligations. A company has liquidity, which indicates its ability to meet its short-term financial obligations quickly, as shown by the amount of current assets, which are assets that can be easily converted into cash, such as cash and inventory.

Company Size

According to Riyanto (2013), company size is used as a useful scale when determining the value of a company. It can be seen as the total value of sales, value, or asset value. Large companies have a greater desire to increase profitability than small companies, according to Munawir (2010). A company with many assets can be considered to have reached maturity because its cash flow is effective and it can have good prospects for the long term.

Profitability

Profitability ratios, according to Munawir (2010: 33), are indicators of business success when they earn profits within a certain period. Profitability ratios can be calculated by comparing the available sections in annual reports, such as income statements and balance sheets. Companies must be able to increase their profitability if they want to remain competitive with other companies. An increasing profitability can be said to be better in achieving the company's profit success.

Hypothesis

The Effect of Capital Structure on Profitability

The effect of capital structure is explained by agency theory, whereby the use of debt in a company's capital structure can reduce agency conflicts because it is considered to encourage managers to make the right decisions about how to repay the company's debt. If funding is through debt, management must regularly pay the principal and interest. This obligation certainly limits the misuse of cash flow. The use of debt as part of a company's capital structure can prevent unnecessary spending and encourage managers to use company funds more effectively, which in turn will improve company performance. This is supported by Pradnyaswari & Dana (2022), and Puji (2022) shows that the capital structure has a positive and significant effect on profitability. Based on this, the following hypothesis can be formulated:

H_1: Capital structure has a positive effect on profitability.

The Effect of Liquidity on Profitability

Companies that can pay their short-term debts when they fall due can also attract the attention of financial specialists and gain the trust of creditors. According to financial specialists, investors are not concerned if a company's debts will not be paid for a long time (Alawiyah et al., 2021). This is also supported by Suryani et al. (2023) and Hermanto & Dewinta (2023), who show that liquidity has a positive and significant impact on profitability. Based on this, the following hypothesis can be formulated:

H_2 : Liquidity has a positive effect on profitability.

The Effect of Company Size on Profitability.

The size of a company indicates that its size is used to determine the strength of a company's sales and number of employees so that the company can grow larger. According to Munawir (2010), larger companies tend to generate higher profitability than smaller companies. Large companies are usually more trusted by investors because they have the ability to improve business performance by striving to improve profit quality. This is because a larger company size can help increase profits because the number of assets owned by the company can increase profit acquisition. Research conducted by Gunawan & Wenny (2023) and Nabihah et al. (2023) shows

that company size has a positive and significant effect on profitability. Based on this, the following hypothesis can be formulated:

H_3: Company size has a positive effect on profitability.

RESEARCH METHOD

This research was conducted on companies listed on the Indonesia Stock Exchange in the property and real estate sector. The objects in this study were capital structure, liquidity, and company size on the Indonesia Stock Exchange from 2020 to 2023. The population of this study consisted of 88 property and real estate companies listed on the Indonesia Stock Exchange from 2020 to 2023. The sample size in this study was determined using purposive sampling. The data collection method in this study was secondary data, which generally consisted of evidence, records, or historical company reports. The data analysis technique in this study was multiple linear regression analysis.

RESULTS AND DISCUSSION

Descriptive Statistics Test Results

Table 2

Descriptive Statistics Test Results

	N	Min	Maximum	Mean	Std. Deviation
DER	80	0.0020	1.7431	0.574560	0.4227738
CR	80	0.87	492.41	27.1002	86.59965
UP	80	15.60	31.83	26.0210	4.10882
ROA	80	0.000049	0.1995	0.04199893	0.038923681
Valid N (listwise)	80				

Source: processed data (2024)

The sample size (N) used in this study was 80 samples, as shown in Table 2 Overall, each variable in the 2020–2023 observation period had the following minimum and maximum values, mean, and standard deviation:

1) The sample size (N) for the capital structure variable is 80 samples, with a minimum value of 0.0020 and a maximum value of 1.7431. The mean value is 0.574560, and the standard deviation is 0.4227738.

2) The sample size (N) for the liquidity variable consists of eighty samples; of the eighty samples, the minimum value is 0.87 and the maximum value is 492.41, with an average value of 27.1002 and a standard deviation of 86.59965.

3) The sample size (N) for the company size variable is 80 samples; from 80 samples, the minimum value is 15.60 and the maximum value is 31.83; the mean value is 26.0210, and the standard deviation is 4.10882.

4) The profitability variable consists of 80 samples (N), with a minimum value of 0.000049 and a maximum value of 0.199586, with a mean of 0.04199893 and a standard deviation of 0.038923681.

Classical Assumption Tests

1. Results of the Normality Test

Table 3
Normality Test Results

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		80
Normal Parameters[a,b]	Mean	0.000000
	Std. Deviation	0.03269499
Most Extreme Differences	Absolute	0.210
	Positive	0.210
	Negative	-0.104
Test Statistic		0.210
Asymp. Sig. (2-tailed)		0.075

Source: Processed data (2024)

Based on Table 3, the results of the Kolmogorov Smirnov Test for normality show an Asymp. Sig. (2-tailed) value of 0.075 > 0.05, thus it can be said that the variable is normally distributed. The value obtained is greater than the significance level of 0.05, so it can be concluded that the data follows a normal distribution.

2. Multicollinearity Test Results

Table 4
Multicollinearity Test Results

Coefficients[a]								
Model		Unstandardized Coefficients		Standardized Coefficients	t		Collinearity Statistics	
		B	Std. Error	Beta		Sig.	Tolerance	VIF
1	(Constant)	0.057	0.019		3.066	0.003		
	DR	-0.050	0.010	-0.539	-5.115	<0.001	0.837	1.194
	CR	0.018	0.005	0.396	3.766	<0.001	0.842	1.188
	UP	0.001	0.001	0.104	1.075	0.286	0.985	1.016

Source: Processed data (2024)

Based on Table 4, it shows that the tolerance value of the independent variables, namely capital structure, liquidity, and company size, is ≥ 0.10 and the VIF value is ≤ 10, so it can be concluded that there is no multicollinearity.

3. Heteroskedasticity Test Results

Table 5

Heteroscedasticity Test Results

Coefficients[a]					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3.230	5.735		0.563	0.575
DR	-1,145	2.978	-0.048	-0.385	0.702
CR	-0.005	0.014	-0.046	-0.366	0.716
UP	-0.050	0.202	-0.029	-0.248	0.805

Source: Processed data (2024)

Based on Table 5, it shows that the significance value for all independent variables is greater than 0.05 (α = 5%), which means that there is no effect of the dependent variable on variables X_1, X_2, and X_3, so it can be concluded that there is no heteroscedasticity, thus fulfilling the heteroscedasticity assumption.

4. Autocorrelation Test Results

Table 6

Autocorrelation Test Results

Durbin-Watson	du	dl
2.006	1.7153	1.5600

Source: Processed data (2024)

Based on Table 6, the table shows the results of the autocorrelation test, which indicates a Watson's Durbin statistic (d) of 2.006 and a dU value of 1.7153, based on a sample size (n) of 80 and the number of independent variables (k) of 3. Therefore, it can be concluded that there is no autocorrelation in the regression model of this study.

Results of the Multiple Linear Regression Equation

Table 7

Results of Multiple Linear Regression Analysis

Coefficients[a]					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	0.057	0.019		3.066	0.003
DR	-0.050	0.010	-0.539	-5.115	<0.001
CR	0.018	0.005	0.396	3.766	<0.001
UP	0.001	0.001	0.104	1.075	0.286
R			0.543		
Adjusted R-Square			0.267		
F			10.572		
Sig. F			<0.001[b]		

Source: Processed data (2024)

Based on Table 7, the multiple linear regression model equation is as follows: $Y= 0.057 -0.050X_1 + 0.018X_2 + 0.001X_3$. This equation provides the following information:

β_1 = -0.050, which means that the capital structure variable has a negative and significant effect on Profitability (Y).

β_2 = 0.018, which means that the liquidity variable has a positive and significant effect on Profitability (Y).

β_3 = 0.001, which means that the company size variable does not have a significant effect on Profitability (Y).

Determination Test Results

To determine the extent of the influence of variable X on Y, the coefficient of determination (R^2) is used. Table 7 shows that the Adjusted R Square value obtained is 0.267. From these calculations, it can be explained that the contribution of the variables of Capital Structure, Liquidity, and Company Size to Profitability in Property and Real Estate Companies is 26.7%, while the remaining 73.3% is influenced by other variables not included in the research model.

F Test Results

The F test is used to determine the validity of the research model. The F test basically aims to see whether all independent or free variables have a simultaneous effect on the dependent variable. Based on Table 7, the F statistic value is 10.572 with an F significance of <0.001, which is less than 0.05. This means that Capital Structure (X_1), Liquidity (X_2), and Company Size (X_3) together affect Profitability (Y) in Property and Real Estate Companies.

T-test Results

The t-test aims to show the extent to which one independent variable individually influences the dependent variable. The level of significance used is 0.05 or 5%.

a) The Capital Structure variable has a regression coefficient value of 0.050, a t-value of -5.115, and a significance value of <0.001, which is less than 0.05. Therefore, H1 is rejected, meaning that capital structure has a negative and significant effect on profitability in property and real estate companies.

b) The Liquidity variable has a regression coefficient value of 0.018, a t-value of 3.766, and a significance value of <0.001, which is less than 0.05. Therefore, H2 is accepted, meaning that liquidity has a positive and significant effect on the profitability of property and real estate companies.

c) The Company Size variable has a regression coefficient value of 0.001, a t-value of 1.075, and a significance value of 0.286, which is greater than 0.05. Therefore, H3 is rejected, meaning that company size does not have a significant effect on the profitability of property and real estate companies.

Discussion

The Effect of Capital Structure on Profitability

The results of the analysis show that capital structure has a negative and significant effect on profitability in property and real estate companies. This indicates that as capital structure increases, profitability will decrease. The results of this study are in line with research conducted by Priscillia & Jati (2023) and Nugraha & Riharjo (2022) ( ), which states that capital structure has a negative and significant effect on profitability.

The Effect of Liquidity on Profitability

The results of the analysis show that liquidity has a positive and significant effect on profitability in property and real estate companies. This indicates that as liquidity increases, the company's profitability will also increase. The results of this study are in line with research conducted by Utaminingsih & Widati (2023), Ramadana et al. (2023), and Falim et al. (2023), which states that liquidity has a positive and significant effect on profitability.

The Effect of Company Size on Profitability

The results of the analysis show that company size does not have a significant effect on the profitability of property and real estate companies. This indicates that the size of a company, whether large or small, does not affect its profitability. The results of this study are in line with the research conducted by Nuraini & Suwaidi (2022) and Kusoy et al. (2023), which states that company size does not have a significant effect on profitability.

CONCLUSION AND LIMITATIONS

Conclusion

Based on the discussion in the previous chapter, the following conclusions can be drawn: Capital structure has a negative and significant effect on the profitability of property and real estate companies. This indicates that the higher the capital structure, the lower the profitability. Liquidity has a positive and significant effect on profitability in property and real estate companies. This shows that as liquidity increases, the company's profitability will also increase. Company size does not have a significant effect on profitability in property and real estate companies. This shows that the size of the company, whether large or small, will not have an impact on the profitability generated.

Limitations

The limitation of this study is that it only uses three test variables, namely capital structure, liquidity, and company size, so it is recommended that future studies add other variables that are related to and have an impact on profitability.

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