

Profitability: Capital structure and firm growth on firm value

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Abstract

The purpose of this study was to test and analyze how the effect of capital structure and company growth on firm value with profitability as an intervening variable. The population of this study is property and real estate companies listed on the stock exchange for the period 2018-2022. While the sample of this study is property and real estate companies that have complete financial reports and there are 4 companies. The sampling technique of this study used purposive sampling, while the analysis method used path analysis with the SPSS version 22 application tool. The results showed that capital structure has a positive effect on firm value, while company growth has a negative effect on firm value. And capital structure and company growth negatively affect profitability. Then profitability is able to mediate capital structure and company growth on firm value.

Keywords: Capital structure, firm growth, profitability, firm value.

INTRODUCTION

The company as an economic entity has several objectives including achieving maximum profit or profit, increasing the welfare of shareholders, and increasing the value of the company which is reflected in the share price. shareholders, and increasing the value of the company which is reflected in the company's stock price company. Asmawi (2018) argue that the company's long-term goal is to maximize company value. Firm value shows a picture or view of investors on the success of the company in managing its resources. The more investors who buy the company's shares, the company's share price will continue to increase and the company's value will increase, increasing company value can make a good assessment of the company's performance and company prospects. With the increase in stock prices, the company's value will also increase, if the company's value increases, investors will be interested in investing in the company. Many factors that can affect the value of the company include capital structure company growth and profitability.

The first factor that affects firm value is capital structure. The capital structure can be used by potential investors as a basis for investing in the company because this variable describes own capital, total debt and total assets where all three are used by them to see the level of risk, return and revenue that will be received by the company. The level of risk, return and revenue of the company can affect the high and low demand for shares which will also affect the value of the company (Krisnando & Novitasari, 2017).

The second factor that affects firm value is company growth. Company growth has an influence on firm value. A company with high growth indicates that the company is growing if the investment is made properly, then the company's growth will bring future profits. Company growth is expected to be directly proportional to the movement of firm value (Krisnando & Novitasari, 2017).

A supporting factor that can affect firm value is profitability. Profitability is a description of management performance in managing the company. Measures of company profitability can be of various kinds such as: operating profit, net profit, rate of return on investment or assets, and rate of return on owner's equity. Amelia & Anhar (2019) reveal that the profitability ratio or profitability ratio shows the company's success in generating profits.

This study examines the relationship between capital structure and company growth on firm value in property and real estate companies listed on the Indonesia Stock Exchange for the period 2018-2022.

Based on the results of previous studies, there are still factors that affect firm value that show inconsistencies and the role of profitability that can mediate the effect of capital structure and company growth on firm value which is still lacking in the research of several researchers. Referring to these studies, the authors are interested in further research on the independent variables of capital structure and company growth and adding profitability as an intervening variable.

The observation period is 5 (five) years, from 2018-2022. The population of property and real estate companies will then be selected using certain criteria as a sample. This study investigates the relationship between capital structure and company growth on firm value in property and real estate companies listed on the Indonesia Stock Exchange for the period 2018-2022. Based on the results of previous research, there are still factors that affect firm value that show inconsistencies and the role of profitability that can mediate the effect of capital structure and company growth on firm value which is still lacking in the research of several researchers. Referring to these studies, the authors are interested in further research on the independent variables of capital structure and company growth and adding variables.

LITERATUR REVIEW

Firm Value

Krisnando & Novitasari (2017) states that a company is an organization that combines and organizes various resources with the aim of producing goods and / or services for sale. The value of the company is the investor's perception of the success rate of a company which is often associated with the stock price. The value of the company can provide maximum prosperity for shareholders if the company's share price increases. The higher the share price, the higher the company value.

Capital Structure

Trade off theory in capital structure explains that the optimal capital structure is determined based on the balance between the optimal benefits and costs of debt leverage. This theory explains that a company will not achieve optimal value if its financing is financed with debt or does not use debt at all to finance the company's operations. The use of debt increases firm value, but only up to a certain point. After that, the use of borrowed capital actually decreases the value of the company. Although the exchange theory model cannot precisely define the optimal capital structure, this theory provides important contributions, namely (Asmawi, 2018):

- a. Rich firms should reduce debt.
- b. Firms that pay high taxes take on more debt than firms that pay low taxes..

Firm Growth

Company growth is a change (decrease or increase) in total assets owned by the company. Company growth is calculated as a percentage change in assets at a certain time against the previous year (Amelia & Anhar, 2019). Based on the above definition, it can be explained that growth is a change in total assets in the form of both an increase and a decrease experienced by the company during one period (one year).

Profitability

The profitability of the company is one of the ways to accurately assess the extent of the return that will be obtained from investment activities. If the condition of the company is categorized as profitable or promises profitability in the future, many investors will invest their funds to buy the company's shares. That, of course, will push the "price" of the stock up to be higher. Profitability is the end result of a number of policies and decisions of the company's management, (Utomo, 2017). In this way, it can be said that the profitability of the company is the ability of the company to generate net income from activities, which are carried out in the accounting period.

RESEARCH METHODS

This research is descriptive quantitative. Quantitative is defined as a research method used to study a particular population or sample. Data analysis is used in data collection, data is quantitative to test the hypothesis given (Meirizda, 2022). The data used in this study are secondary or numerical data. The samples used in this study are property and real estate companies listed on the Indonesia Stock Exchange in 2018-2021.

Operational Definitions and Research Variable Indicators

Dependent Variable

Company Value

Firm value is the perception of investors regarding the company's success rate as seen from the stock price. The ratio indicator used in measuring firm value in research is PBV (price book value). The PBV ratio can be seen as follows:

$$PBV = \frac{\text{stock price per common share}}{\text{book value per share}}$$

$$\text{Book value per common share} = \frac{\text{common stock equity}}{\text{number of common shares outstanding}}$$

Independent Variable

Capital Structure (DER)

Capital structure is defined as the mix of debt and equity used by the company in its operational activities. The capital structure in this study is calculated using the DER (debt to equity ratio) indicator, which can be formulated as follows:

$$DER = \frac{\text{Total Debt}}{\text{equity}}$$

Company Growth (Growth)

Company growth is measured by changes in the balance sheet. Asset growth is the difference between the assets owned by the company in the current and previous periods and the total assets in the previous period (Mahatma & Wijaya, 2014). Growth can be measured using the following formula:

$$Growth = \frac{\text{Total asset (t)} - \text{total asset (t-1)}}{\text{total asset (t-1)}} \times 100\%$$

Profitability Variable (Intervening)

Profitability is measured by return on equity (ROE), which is the ratio of the company's share ownership after tax. The higher the ROE, the higher the return investors will receive from their investment in stocks. The ROE ratio is determined by the following formula:

$$ROE = \frac{\text{Net Profit after tax}}{\text{Own Capita}} = \frac{EAT}{E}$$

Methods Of Data Analysis

Based on the problem and research objectives, the number of variables, the type of hypothesis and the form of relationship between variables, the analysis technique used in this study is to use the Path Analysis Method using secondary data. Then proceed with the classical assumption test consisting of normality of multicollinearity, heteroscedasticity, and autocorrelation. Then proceed with the significance test with the f test, t test and the coefficient of determination test. Because this research uses the path analysis method, these stages are applied to two models. The first model is capital structure and company growth as independent variables and profitability as the dependent variable. Then the second is with Capital Structure and Company Growth as independent variables, Profitability as intervening variable and Company Value as dependent variable. Measurement is done both to determine the direct effect, indirect effect, and total effect.

RESULTS AND DISCUSSIONS

Resultans

Normality test

Table 1. Normality Test Results

		Unstandardized Residual
N		20
Normal Parameters ^{a,b}	Mean	,0000000
	Std. Deviation	,14632147
Most Extreme Differences	Absolute	,135
	Positive	,135
	Negative	-,084
Test Statistic		,135
Asymp. Sig. (2-tailed)		,200 ^{c,d}

The normality test aims to test the normality of the distribution in the regression model on confounding variables or residual variables. It is said that the regression model complies with the assumption of normality if the Kolmogorov Smirnov value is not significant, or greater than 0.05. Based on the results of the normality test in the table above, it shows that the Asymp value is 0.135, this value is said to be normal because it is greater than the significance level of 0.200 > 0.05.

Multicollinear Test

Table 2. Multicollinear Test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3,797	,720		5,276	,000		
	Capital structure	-5,233	2,325	-,494	-2,251	,039	,705	1,419
	Company growth	-,798	6,971	-,021	-,114	,910	,983	1,017
	Profitability	-2,740	2,260	-,264	-1,213	,243	,714	1,400

Based on table 2, the multicollinearity test results show that the Tolerance value is above 0.1 and the VIF value is below 10.00, so there are no multicollinearity symptoms.

Autocorrelation Test

Table 3. Autocorrelation Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,676 ^a	,457	,355	1,44128	1,080

Based on table 3 above, it can be concluded that the results of the autocorrelation test obtained a Durbin-Watson value of 1.080 with a significant level of 0.05. DU is 1.5367 and 4-DU is 2.4633. This shows that there is no autocorrelation because it meets the criteria $DU < DW < 4-DU$ or $1.5367 < 1.080 < 2.4633$.

Heteroscedasticity Test

Table 4. Heteroscedasticity Test

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
1 (Constant)	1,848	,487			3,793	,002
Capital structure	-2,545	1,107	-,563		-2,298	,035
Company growth	-3,059	3,036	-,191		-1,008	,329
firm value	,027	,104	,064		,261	,797

Based on table 4 above, it states that there is no heteroscedasticity problem in the regression model because the significant level is higher than 0.05 for all independent variables.

Hypothesis Test Path Analysis Test

Table 5. Path Analysis Test – 1

Based on the table on 5 path analysis test results, the equation above can be made with structural

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
1 (Constant)	,069	,045			1,551	,139
Capital structure	,215	,125	,388		1,726	,102
Company growth	-,234	,441	-,119		-,530	,603
F Count	3,400					
Sing F	,057					
R Square	,286					

Equation 1 is $\epsilon_1 = 0,069 + 0,125 + 0,441 = \sqrt{(1 - (0,286))} = 0,844$.

Table 6. Path Analysis Test – 2

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
1 (Constant)	3,797	,720			5,276	,000
Capital structure	-5,233	2,325	-,494		-2,251	,039
Company growth	-,798	6,971	-,021		-,114	,910
Profitability	-2,740	2,260	-,264		-1,213	,243
F Count	4,490					
Sing F	,243					
R Square	,457					

Based on the table on 6 path analysis test results, the equation above can be made with structural equation 2 is $\epsilon_2 = 379 + 5,233 + 0,798 + 2,740 = \sqrt{(1 - (0,457))} = 0,736$.

Individual Parameter Significance Test (t Statistical Test)

- The first hypothesis (H1) states that capital structure affects firm value. In table 1.7, namely in path analysis equation 2, it shows that the t-count value is $2.251 > t$ -table of 2.1199, the coefficient (beta) is -0.494 with a significant value of 0.039 ($0.039 < 0.050$). Therefore, the first hypothesis (H1) is influential.
- The second hypothesis (H2) states that company growth has no effect on firm value. In table 1.7, namely in path analysis equation 2 that the t-count value is $0.530 < t$ -table of 2.1199, the coefficient

(beta) is -0.119 with a significance of 0.603 ($0.603 > 0.050$). Therefore, the second hypothesis (H2) has no effect.

3. The third hypothesis (H3) states that capital structure has no effect on profitability. In table 1.6, namely in path analysis equation 1 that the t-count value is $1.726 < t\text{-table of } 2.1199$, the coefficient (beta) is 0.388 with a significant of 0.139 ($0.139 > 0.050$). Therefore, the third hypothesis (H3) has no effect.
4. The fourth hypothesis (H4) states that company growth has no effect on profitability. In table 1.6, namely in path analysis equation 1 that the t-count is $0.530 < t\text{-table of } 2.1199$, the coefficient (beta) is -0.119, with a significant of 0.603 ($0.603 > 0.050$). Therefore, the fourth hypothesis (H4) has no effect.
5. The fifth hypothesis (H5) states that profitability has no effect on firm value. In table 1.6, namely in path analysis equation 2 that t-count of $1.213 < t\text{-table of } 2.1199$, coefficient (beta) of -0.264, with a significant 0.243 ($0.243 > 0.050$). Therefore, the fifth hypothesis (H5) has no effect.
6. The direct effect of capital structure on firm value in equation table 2 is 0.494 and the indirect effect of capital structure on firm value through profitability is the multiplication between the beta value of profitability on firm value which is $0.388 \times 0.264 = 0.1024$. The total effect between direct effect and indirect effect is $0.494 + 0.1024 = 0.5964$. Based on the results of these calculations, it is known that the value of the indirect effect is greater than the value of the direct effect, or $0.5964 > 0.494$, this indicates that profitability is able to mediate the capital structure on firm value, so that the sixth hypothesis (H6) has an effect.
7. The direct effect of company growth on firm value in equation table 2 is 0.021 and the indirect effect of company growth on firm value through profitability is the multiplication of the beta value of profitability on firm value, which is $0.119 \times 0.264 = 0.0314$. The total effect between the direct effect and the indirect effect is $0.021 + 0.0314 = 0.0524$. Based on the results of these calculations, it is known that the value of the direct effect is greater than the value of the indirect effect or $0.0524 > 0.021$, this shows that profitability is stated to be able to mediate company growth on firm value, so the seventh hypothesis (H7) has an effect.

Discussion

The Effect of Capital Structure on Firm Value

The results of testing the first hypothesis (H1) show that capital structure has a positive effect on firm value. This is evidenced by the significant value of capital structure on firm value with t-count of $2.251 > t\text{-table of } 2.1199$, coefficient (beta) of -0.494, with a significant value of $0.039 < 0.050$. This figure shows that the influence of the two variables is positive and significant.

The trade-off theory explains that if the capital structure position is below the optimal point, then any additional debt will increase the firm's value. Conversely, if the capital structure position is above the optimal point, then any additional debt will decrease the firm's value. Therefore, assuming the optimal capital structure target has not been achieved, based on the trade-off theory, it predicts a positive relationship to firm value (Krisnando & Novitasari, 2017). This research is in line with research conducted by Utomo (2017) which shows that capital structure has a positive and significant effect on firm value.

The Effect of Company Growth on Company Value

The results of testing the second hypothesis (H2) show that company growth has no effect on firm value. This is evidenced by the significant value of company growth on firm value with a t-count of $0.530 < t\text{-table of } 2.1199$, coefficient (beta) of -0.119, with a significant value of $0.603 > 0.050$. This figure shows that company growth has no effect on firm value.

Company growth has no effect on firm value because companies with high growth rates in relation to leverage should use equity as a source of financing so that agency costs do not occur between shareholders and company management. The faster the company grows, the greater the need for funds

for expansion, this is in accordance with signaling theory which explains that companies that have good performance will attract attention (Pradnyaswari & Dana, 2022). The results of this study are in accordance with research conducted by Utomo (2017) which states that company growth has no negative and significant effect on firm value.

Effect of Capital Structure on Profitability

The results of testing the third hypothesis (H3) show that capital structure has no effect on profitability. This is evidenced by the significant value of capital structure on the value of profitability with a t-count of $1.726 < t\text{-table of } 2.1199$, coefficient (beta) of 0.388 with a significant of $0.139 > 0.050$. This figure shows that capital structure has no effect on profitability.

This is in accordance with Trade off theory is a capital structure theory which states that companies exchange the tax benefits of debt funding with the problems caused by potential bankruptcy (Analisa, 2011). If the company finances investment using debt, the company can benefit by utilizing the tax side of interest payments which can reduce the amount of tax paid by the company.

However, debt funding also has a negative impact on the company. If the company has exceeded the debt funding limit, the costs associated with corporate bankruptcy will exceed the benefits obtained from tax benefits. The results of this study are in line with the research of (Krisnando & Novitasari, 2017) which also shows that company growth has a negative effect on firm value.

The Effect of Company Growth on Profitability

The results of testing the fourth hypothesis (H4) show that company growth has no effect on profitability. This is evidenced by the significant value of capital structure on the value of profitability with a t-count of $0.530 < t\text{-table of } 2.1199$, coefficient (beta) of -0.119 , with a significant of $0.603 > 0.050$. This figure shows that company growth has no effect on profitability.

However, this is in accordance with signaling theory which explains that companies can signal prosperity to owners or shareholders in presenting financial statement (Pradnyaswari & Dana, 2022). The results of this study are in line with research conducted by Amelia & Anhar (2019) which also found the same thing that growth has no effect on profitability. Amelia & Anhar (2019) also found the same thing that growth was unable to influence ROE.

The Effect of Profitability on Company Value

The results of testing the fifth hypothesis (H5) show that profitability has no effect on firm value. This is evidenced by the significant value of profitability on firm value with t count of $1.213 < t\text{-table of } 2.1199$, coefficient (beta) of -0.264 , with a significant $0.243 > 0.050$. This figure shows that

Profitability has no effect on firm value because a low level of profitability indicates a negative signal given by the company to stakeholders, this can later affect investment decisions. In accordance with signaling theory which explains that companies provide signals to users of financial statements, especially to investors who will make investments. Empirical results show that profitability partially has no effect on firm value Krisnando & Novitasari (2017) rofitability has no effect on firm value.

The Effect of Capital Structure on Firm Value Through Profitability

The sixth hypothesis (H6) proposed in this study is capital structure on firm value through profitability. The direct effect of capital structure is 0.494 while the indirect effect of capital structure on firm value through profitability is 0.1024 . Based on the results of the study shows that the indirect effect is greater than the direct effect. So, the test results in this study state that profitability is able to mediate capital structure on firm value.

Signaling theory explains that high profitability will be able to show good company prospects so that investors will respond positively, and the company's value will increase. Appropriate and efficient use of debt will increase the company's profitability, and increased profitability will be a positive signal to interested parties that the company's value has increased (Dwi, 2017) . Dwi (2017) shows that profitability is able to mediate the effect of capital structure on firm value.

The Effect of Company Growth on Firm Value Through Profitability

The seventh hypothesis (H7) proposed in this study is company growth on firm value through profitability. The direct effect given by company growth is 0.021 while the indirect effect of company growth on firm value through profitability is 0.0314. Based on the results of this study, it shows that the indirect effect is greater than the direct effect. So, the test results in this study state that profitability is able to mediate company growth on firm value.

Signalling theory states that increasing company growth directly gives a good signal to investors that the company has good performance. So that investors do not need to pay attention to the value of profitability to invest in their shares. The results of this study are relevant to Sunandes (2017), which proves that company growth can have a positive effect on profitability as an intervening variable. The results of research conducted by Repi et al. (2016), which proves that profitability is able to mediate company growth on firm value.

CONCLUSION

Based on the results of the research conducted, it can be concluded that the results show that capital structure has a positive effect on firm value, while for company growth has a negative effect on firm value. For capital structure and company growth have a negative effect on profitability, and profitability has a negative effect on firm value. While the capital structure and Firm growth has a positive effect on firm value through profitability, in other words profitability is able to mediate the relationship between capital structure and firm growth.

Data collection in this study uses secondary data with a sample of 4 companies with a total of 20 data for 5 years which proves financial statement data in 2018-2022 in manufacturing companies that have been listed on the IDX. However, this study was tested using the path analysis test to test direct equations and indirect equations through other variables besides intervening variables.

The implication of this research is that it is expected to help a company in providing information as a basis for making a decision. The main objective in a company that has gone public is to maximize the value of the company, considering that this is very important for the company in attracting investors. This is very important for companies in attracting investors. If the company value is good, it means that the performance of a company has a good reputation in the future so that it can generate profits for the company. generate profits for the company. Therefore, with increased profits will be an attraction for investors to invest their capital into the company capital into the company.

This research uses profitability variable as an intervening variable on the effect of capital structure and firm growth on firm value. The development of this research is suggested by adding proxies for profitability variables or adding/replacing intervening variables that can affect firm value, for example dividend policy variables. Increase the observation period to five years so that the data used is more significant or by adding several economic driver sector companies listed on the IDX such as manufacturing, mining. Using the structural equation modeling (SEM) analysis test because it is able to analyze the reciprocal relationship model (recursive) simultaneously, where this model cannot be solved by linear regression analysis simultaneously.

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