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The Effect of Business Risk, Company Size, Investment Decisions, Board Size, Profitability on Capital Structure in Property and Real Estate Companies for the Period 2018 - 2022

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ABSTRACT

This study aims to determine the impact of Business Risk, Firm Size, Investment Decisions, Board Size, and Profitability on Capital Structure in property and real estate sector companies listed on the Indonesia Stock Exchange. This study used a sample of 12 companies during the period 2018 - 2022 with a total of 60 data. In this study there are research methods which include Descriptive Statistics, Classical Assumption Test, Multiple linear regression analysis, T test, F test, and Coefficient of determination. Based on the results of the research analysis, it shows that the business risk, investment decision, and profitability variables have a negative and significant effect on the capital structure. Company size variable have no significant influence on capital structure. While the board size variable has a positive and significant effect on capital structure.

Keywords
Business Risk, Firm Size, Investment Decisions, Board Size, Profitability, Capital Structure.

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INTRODUCTION

The property and real estate sector in Indonesia is growing rapidly and contributes significantly to the economy, reaching 14.63% to 16.30% of GDP, or equivalent to IDR 2,349 - IDR 2,865 trillion per year. According to Bank Indonesia's Survey of Residential Property Prices (SHPR), the Index of Residential Property Prices (IHPR) increased 1.87% on an annualized basis in the first quarter of 2022, while property demand also rose 9.2% year-on-year.

Consistent growth in the property and real estate sector creates attractive business opportunities and long-term investment prospects, with high return potential for investors. To maintain long-term success and achieve goals, companies need to maintain operational continuity and ensure sufficient funding. This funding can come from internal sources such as retained earnings, or external sources such as credit, share issues, and bonds, all of which are related to the capital structure of the company.

Capital structure refers to the way a company finances all its assets using a combination of equity and debt (Stoiljkovic et al, 2022). The ratio between total debt and total equity is called the Debt Equity Ratio (DER). A high DER indicates that the company uses more debt for its operations, while a low DER indicates that the company relies more on its own capital, which is considered safer because there is less debt to pay.

The decision on the company's capital structure becomes optimal if the company considers the proportion of capital and analyzes the factors that affect it. The optimal capital structure is reflected in the achievement of the company's objectives with minimum cost and maximum profit, which in turn increases the welfare of the shareholders. Factors that influence capital structure decision include business risk, firm size, investment decision, board size, and profitability.

Business risk is the uncertainty that arises when a company runs its operations, related to the expected rate of return and profit in the future (Ferliana and Agustina, 2018). The principle of "high risk high return" applies, where the higher the expected return, the greater the business risk faced. Companies with large business risks tend to reduce the use of debt funding compared to companies with smaller risks.

Firm size refers to the scale used to classify companies based on total assets, log size, stock market value, and so on (Triyono, Kusumas, and Palupi, 2019). Company size shows how large or small the total assets owned are. A company with large total assets is considered a large company, which indicates that the company has extensive operations and requires large capital. Large companies have a higher ability and flexibility to obtain capital, including through debt from external sources. According to Ferliana and Agustina (2018), creditors have more confidence in large companies because of their wealth, while small companies with limited total assets tend to have more limited access to funding.

Investment decision is one of the variables that affect the company's capital structure. Investment is an investment with the hope of obtaining profits in the future. The addition of fixed assets is one indicator of investment decisions (Arizki, Masdupi, and Zulvia, 2019). This decision involves the allocation of funds to acquire or add fixed assets, which then affects the company's capital structure. To finance investment in fixed assets, companies can use internal capital such as retained earnings, or external capital such as debt or share issuance.

Board size refers to the corporate governance structure, consisting of members of the board of directors and commissioners, who are tasked with

overseeing the company's operations (Yusuf and Sulung, 2018). Board size can affect decision-making efficiency. The larger the board size, the efficiency of monitoring management tends to decrease, which can make it difficult to make decisions and result in high leverage. However, according to Aldiansyah, Mai, and Marwansyah (2023), creditors have more confidence in companies with large board sizes, because they are considered capable of implementing more effective controls.

Profitability is the company's ability to earn profits from sales activities, total assets, and capital owned (Triyono, Kusumastuti, and Palupi, 2019). In this study, profitability is measured by the return on assets (ROA) ratio, which is the ratio between company profits and total assets owned (Ariyani, Pangestuti, and Raharjo, 2018). The company is considered effective in managing its assets if it can generate maximum profit. According to research by Pertiwi and Darmayanti (2018), companies with high profits tend to use less debt.

Based on the background described above as described regarding the variables of business risk, firm size, investment decision, board size, and profitability, the authors will conduct further research related to the company's capital structure which is important and basic for each company that wants to achieve its company goals. So that research will be carried out with the title "The Effect of Business Risk, Firm Size, Investment Decision, Board Size, and Profitability on Capital Structure in Property and Real Estate Companies".

RESEARCH METHODE

This research is a type of quantitative research with a cross section method, namely using data from various different subjects (different companies) in the same period. The population in this study were all property and real estate companies included in the Indonesia Stock Exchange (IDX) in the period 2018 - 2022. This study uses purposive sampling technique, where the sample is determined based on certain criteria (Sugiyono, 2019). Based on the criteria determined by the author, there are 12 companies with a total sample of 60 data, including property and real estate companies listed on the Indonesia Stock Exchange, having financial reports and annual reports that are consistently public during the 2018-2022 period in rupiah currency, and those that earn profits continuously during the 2018-2022 period.

RESULT AND DISCUSSION

Normality Test

The normality test is carried out to determine whether the data analyzed in this study are normally distributed or not (Ghozali, 2018). To carry out the

normality test in this study using the Kolmogorov-smirnov test (1-Sample K-S test).

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		60
Normal Parameters[a,b]	Mean	0E-7
	Std. Deviation	.53611333
Most Extreme Differences	Absolute	.089
	Positive	.089
	Negative	-.064
Kolmogorov-Smirnov Z		.688
Asymp. Sig. (2-tailed)		.731

a. Test distribution is Normal.

b. Calculated from data.

Figure 1.
Normality Test Results

Based on the results of Figure 1, it can be seen that the Asymp.Sig (2-tailed) value is 0.731 so it can be concluded that Business Risk, Firm Size, Investment Decision, Board Size, Profitability and Capital Structure are normally distributed because the Asymp.Sig (2-tailed) value is 0.731> 0.05.

Multicollinearity Test

Multicollinearity test is conducted to see whether or not there is a correlated relationship between the independent variables.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-2.761	2.757		-1.001	.321		
	LN_X1	-.381	.117	-.473	-3.254	.002	.275	3.633
	FIRM SIZE	-.048	.106	-.060	-.454	.652	.338	2.962
	LN_X3	-.274	.101	-.303	-2.708	.009	.465	2.150
	LN_X4	1.086	.310	.524	3.508	.001	.261	3.834
	LN_X5	-.454	.094	-.632	-4.810	.000	.337	2.966

a. Dependent Variable: LN_Y

Figure 2.
Multicollinearity Test Results

Based on the Figure of multicollinearity test results, it can be seen that each variable has a VIF value smaller than 10, as well as the Tolerance value of each variable also has a value> 0.01 so it can be concluded that Business Risk, Firm Size, Investment Decision, Board Size, Profitability and Capital Structure are free from multicollinearity symptoms.

Autocorrelation Test

The autocorrelation test aims to determine whether in the regression model there is a correlation between period t and period t-1 or the previous period.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.828[a]	.686	.657	.47031	1.652

a. Predictors: (Constant), LN_X5, LN_X4, LN_X3, FIRM SIZE, LN_X1

b. Dependent Variable: LN_Y

Figure 3.
Autocorrelation Test Results

Based on the results of the autocorrelation test, it can be seen that the Durbin Watson value is 1.652 which can be concluded that Business Risk, Firm Size, Investment Decision, Board Size, Profitability and Capital Structure do not have autocorrelation symptoms because the Durbin Watson value of 1.652 is between -2 to +2.

Heteroscedasticity Test

The heteroscedasticity test aims to determine whether in the regression model, there is a change in the variance of the residuals for each observation made. According to Ghozali (2018), one method that can be used to test for heteroscedasticity is the Glejser test.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.919	1.859		-1.570	.122
	LN_X1	-.035	.079	-.111	-.446	.657
	FIRM SIZE	.114	.072	.357	1.595	.117
	LN_X3	.067	.068	.187	.979	.332
	LN_X4	-.213	.209	-.260	-1.019	.313
	LN_X5	.043	.064	.151	.674	.503

a. Dependent Variable: ABS_RES2

Figure 4.
Heteroscedasticity Test Results

Based on the results of the heteroscedasticity test, it can be seen that the significance coefficient value of each variable is greater than 0.05, so it is concluded that Business Risk, Firm Size, Investment Decision, Board Size, Profitability and Capital Structure do not have symptoms of heteroscedasticity.

International Journal of Education, Social Studies, And Management (IJESSM)
Volume 4, Issue 3, October 2024
Page 907-916

Multiple Linear Regression Analysis

Multiple linear regression analysis is an analysis used to identify the relationship between two or more independent variables with one dependent variable (Ghozali, 2018).

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.761	2.757		-1.001	.321
	LN_X1	-.381	.117	-.473	-3.254	.002
	FIRM SIZE	-.048	.106	-.060	-.454	.652
	LN_X3	-.274	.101	-.303	-2.708	.009
	LN_X4	1.086	.310	.524	3.508	.001
	LN_X5	-.454	.094	-.632	-4.810	.000

a. Dependent Variable: LN_Y

Figure 5.
Multiple Linear Regression Analysis

Based on multiple regression analysis, the regression equation is obtained as follows :

DER=-2.761-0.381 BRISK-0.048 B-SIZE-0.274 PER+1.086 BSIZE-0.454 ROA+ ε

Test Coefficient of Determination (R^2)

The coefficient of determination is used to determine how much the independent variables are able to explain or influence the dependent variable (Ghozali, 2018).

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.828[a]	.686	.657	.47031	1.652

a. Predictors: (Constant), LN_X5, LN_X4, LN_X3, FIRM SIZE, LN_X1

b. Dependent Variable: LN_Y

Figure 6.
Coefficient of Determination

Based on the coefficient of determination test results presented in the table above, it can be seen that the adjusted R-square value is 0.657 or 65.7%. This percentage shows that Business Risk, Firm Size, Investment Decision, Board Size, and Profitability) are able to explain the Capital Structure by 65.7%, and the remaining 34.3% is explained by other variables outside this study.

Simultaneous Hypothesis Test (F Test)

The F test is one of the analytical tools to determine whether the independent variables simultaneously have an influence on the dependent variable (Ghozali, 2018).

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	22.204	5	4.441	15.161	.000[b]
	Residual	15.817	54	.293		
	Total	38.021	59			

a. Dependent Variable: Ln_Y

b. Predictors: (Constant), Ln_X5, Ln_X2, Ln_X3, Ln_X1, Ln_X4

Figure 7.
F Test Results

Based on the results of the F test, the probability value (F statistic) of 0.000 is smaller than 0.05 and the value of F count 23.578> F table 2.36, so it can be said that the independent variables (Business Risk, Firm Size, Investment Decision, Board Size, and Profitability) together have a significant influence on the dependent variable (Capital Structure).

Partial Hypothesis Test (T Test)

T-test is one of the analytical tools to determine the significant level of influence of each independent variable on the dependent variable (Ghozali, 2018).

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.761	2.757		-1.001	.321
	LN_X1	-.381	.117	-.473	-3.254	.002
	FIRM SIZE	-.048	.106	-.060	-.454	.652
	LN_X3	-.274	.101	-.303	-2.708	.009
	LN_X4	1.086	.310	.524	3.508	.001
	LN_X5	-.454	.094	-.632	-4.810	.000

a. Dependent Variable: LN_Y

Figure 8.
T Test Results

Effect of Business Risk on Capital Structure

Business risk has a coefficient of -3.254 which means that an increase in business risk negatively affects the capital structure. When the business risk is higher, the capital structure will be smaller. Then this business risk variable has a significance or probability value of 0.002 smaller than the significance level of 0.05, which means that there is a significant influence between business risk

variables on capital structure. This is in line with research conducted by Alnajjar (2015) and Nuzula et al (2016).

Effect of Company Size on Capital Structure

Company size has a coefficient of -0.454 which means that an increase in company size has a negative effect on capital structure. Where when the company size is higher, the capital structure will be smaller. Then the firm size variable has a significance or probability value of 0.652 which is greater than the significance level of 0.05, which means that the firm size variable has no effect on the capital structure. This is in line with research conducted by Yoshendy, Achsani, and Maulana (2015) and Rosdiana, Karyatun, and Sari (2023).

Effect of Investment Decision on Capital Structure

Investment decision has a coefficient of -2.708 which means that the increase in investment decision negatively affects the capital structure. When the investment decision is higher, the capital structure will be smaller. Then this variable has a significance or probability value of 0.009 smaller than the significance level of 0.05, which means that the investment decision variable affects the capital structure. This is in line with research conducted by Rizkiwati and Anwar (2023), which states that investment decision negatively affects capital structure.

Effect of Board Size on Capital Structure

Board size has a coefficient of 3.508 which means that the increase in board size has a positive effect on capital structure. When the board size is higher, the capital structure will be greater. Then this variable has a significance or probability value of 0.001 smaller than the significance level of 0.05, which means that the board size variable affects the capital structure. This is in line with research conducted by Manu et al (2019), Feng et al (2020), and Ria (2023).

Effect of Profitability on Capital Structure

Profitability has a coefficient of -4.810 which means that an increase in profitability negatively affects the capital structure. When the profitability is higher, the capital structure will be smaller. Then this variable has a significance or probability value of 0.000 smaller than the significance level of 0.05, which means that the profitability variable has a significant effect on the capital structure. This is in line with research conducted by Nurdani and Rahmawati (2020) and Triyono, Kusumastuti, and Palupi (2019).

CONCLUSION

Based on the research results, the following conclusions can be drawn: 1) business risk has a negative and significant effect on capital structure. 2) company size has no significant effect on capital structure. 3) investment

decision has a negative and significant effect on capital structure. 4) board size has a positive and significant effect on capital structure. 5) profitability has a negative and significant effect on capital structure.

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