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## THE EFFECT OF INSTITUTIONAL OWNERSHIP, PROFITABILITY, AND LIQUIDITY ON CAPITAL STRUCTURE WITH THE COST OF CAPITAL AS A MEDIATING VARIABLE: EMPIRICAL STUDY ON PROPERTY COMPANIES LISTED ON THE INDONESIAN STOCK EXCHANGE IN 2018 - 2022

Saumi Zulviana<sup>1</sup>, Rida Prihatni<sup>2</sup>, Ety Gurendrawari<sup>3</sup>

Faculty of Economics, Universitas Negeri Jakarta, Indonesia

[zulvianalukman28@gmail.com](mailto:zulvianalukman28@gmail.com), [ridaprihatni@unj.ac.id](mailto:ridaprihatni@unj.ac.id), [egurendra@unj.ac.id](mailto:egurendra@unj.ac.id)

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### ABSTRACT

This study aimed to determine and analyze the effect of institutional ownership, profitability, and Liquidity on capital structure with the cost of Capital as a mediating variable in property companies listed on the Indonesian stock exchange in 2018 - 2022. The method used in this research is quantitative. The population in the study were 92 Property and Real Estate companies listed on the Indonesia Stock Exchange in 2018-2022. The sampling technique used purposive sampling. The data analysis technique uses the classic assumption test and hypothesis testing. The results showed that in property companies on the IDX for the 2018-2022 period, institutional ownership had no significant effect on the structure and cost of Capital. Profitability has a significant negative effect on capital structure and a significant positive effect on the cost of Capital. Liquidity has no significant effect on capital structure, but is significantly negative on the cost of Capital. The cost of Capital has a significant positive effect on capital structure. It can mediate the effect of profitability on capital structure. However, it does not mediate the effect of institutional ownership and Liquidity. This study has implications for corporate financial policy, especially in managing capital structure and cost of Capital. Companies need to pay attention to profitability and liquidity factors in making financial decisions, because both significantly influence the structure and cost of Capital.

**Keywords:** Institutional Ownership, Profitability, Liquidity, Capital Structure, Cost of Capital.

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Corresponding Author: Saumi Zulviana

E-mail: [zulvianalukman28@gmail.com](mailto:zulvianalukman28@gmail.com)



### INTRODUCTION

The era of Globalization affects various structures of life, including the business world. Progress in the business world, one of which is marked by the high influence of globalization, companies are required to compete competitively with other companies where they must adjust to the current situation and manage important company functions. The company carries out several strategies to show its roots in the industrial world because every company expects its company to run well both financially and non-financially (Febiyanti & Hersugondo, 2022). The main goal that the company wants is to bring prosperity to the owners of the company. The company is expected to operate in the long term with increasing profits. What the company needs to achieve its goal is a source of funding. The optimal capital structure is the company's goal to decide the funding policy by considering several things (Khafid et al., 2020). The purpose of forming a capital structure is to increase the company's share price, which is then expected to increase the welfare of the company owner.

Capital structure refers to the sources of financing available for a firm's current and potential investment needs. Specifically, capital structure decisions include the choice between debt and equity financing. Optimal capital structure decisions can lower business risk, increase the net present value of the firm's investment projects and maximize shareholder value (Javaid et al., 2023). The right mix of capital structure is essential to maximise profits and improve the organization's ability to meet the requirements of the competitive environment. The importance of capital structure is also expressed by (Ndua et al., 2023); a company with a strong capital structure can increase its stock return through an increase in stock price. One of the factors that determine the sustainability of the company's business is debt management/capital structure; management is required to manage debt efficiently and effectively so as not to burden the company's finances, which impacts company performance.

Infrastructure development will trigger many advances in the economic sector. In the process of increasing development, there will be many companies in the property and real estate sector so new entrepreneurs will emerge in the service sector. Property sector companies are one of the companies that have a high debt/capital structure ratio. Based on data from real estate investment trusts (REITs), property sector companies' debt ratio (DER) amounted to 366% in 2022. To avoid risks for the company, the debt owned by the company must be paid off immediately before maturity. If the ratio is high, it will have a large amount of debt, affecting the performance of a company with high Liquidity (Gartenberg et al., 2019). This causes investors to be hesitant to invest in the company because this can pose a high risk to the company (Asad et al., 2019) added that the debt-to-equity ratio can measure companies that can pay off all debts borne by their assets. The following is debt-to-equity ratio data on the property and real estate sub-sector industry listed on the Indonesia Stock Exchange (IDX) during 2016-2020.



Figure 1. Average Debt to Equity Ratio of Property and Real Estate Sub-Sector Industry

The data shows that companies in the property and real estate sub-sector listed on the Indonesia Stock Exchange throughout the 2016-2022 timeframe have a fairly high DER ratio value, even in 2022, reaching the level of 100%. Indicating that the company's debt exceeds its equity. From this data, companies in the property and real estate sub-sector experienced challenges in maintaining a balance between their debt and equity during the observed period. It also shows significant fluctuations in the financial structure of property companies over the past few years.

Capital structure is the firm's strategic decision, and several previous studies have focused on exploring the factors associated with the dynamics of a firm's financial structure. Despite the abundant literature and strong theoretical background, the capital structure conundrum still needs to be debated in the corporate finance literature. Several factors, such as the level of supervision by institutional shareholders, audit committees, and firm characteristics, influence property firms' debt policy/capital structure.

An alternative to reducing the debt-to-equity ratio is institutional ownership. Institutional ownership is intended to oversee manager performance. Agency theory estimates that reducing agency problems can be done with the power of institutional ownership, which is expected to replace the role of debt as a management monitor (Short et al., 2002). Institutional ownership is a condition where a company can display the percentage an institution owns (Ardiyanto & Marfiana, 2021). Institutional investors (Choi et al., 2020) play an increasingly important role in company management because they are large shareholders and, as such, have a strong incentive to monitor the company. As managers of the company, managers will know more internal information and opportunities that the company will obtain in the future compared to shareholders or principals. Some of these institutions include government institutions, private institutions, and domestic and foreign institutions. Institutional ownership affects the capital structure negatively if studied through pecking order theory because it reduces the information gap between management and external shareholders and the role of institutional investors as a substitute for debt control if studied with agency theory, consistent with research (Michael & Vincent, 2012). (Choi et al., 2020) their research found that a company's debt level will be low if the level of institutional ownership is high. (Gurusamy, 2024) added that institutional ownership hurts capital structure. However, research by (Khafid et al., 2020) shows that managerial and institutional ownership have no significant effect on capital structure.

Furthermore, the capital structure policy of a firm can also be influenced by firm characteristics. Firm characteristics are firm-specific characteristics that can affect firm performance positively or negatively. Firm characteristics include factors such as profitability and Liquidity. (Amahalu, 2019). Profitability is the company's ability to generate profits through sales, assets and share Capital. The company's profit greatly affects the company's funding, because the higher the profit generated, the company will use more of its internal funds. The company's ability to fund its activities with internal funds will be able to reduce the use of debt, and vice versa. If the company uses more external funds compared to internal funds, the company's debt will increase. The company's internal funds are insufficient to fund its operational activities. Therefore, company management is required to generate optimal profits to finance its operational activities with internal funds (Brigham & Houston, 2012) stated that companies with a high level of profitability will reduce the use of debt funding. The higher a company's profitability level, the smaller its capital structure will be. This also aligns with research (Al-Najjar & Taylor, 2008), which found that profitability hurts capital structure. (Albart et al., 2020) In his research, he found that profitability significantly affects the company's capital structure. Likewise, research (Okegbe & Ofurum, 2019) found the effect of profitability on capital structure.

Besides profitability, liquidity factors can also affect the capital structure. Liquidity is the company's ability to pay short-term obligations on time when due (Fahmi, 2016). Where the Liquidity

of the company also affects the funding of the company. If a company has a high liquidity ratio, its ability to pay its obligations grows. Research conducted (Ulupui & Prihatni, 2018) about the effect of profitability and Liquidity on capital structure states that Liquidity has a significant effect on capital structure. The results of this study are supported by research conducted (Bhawa, 2015), which states that Liquidity affects the capital structure, where the greater the Liquidity, the greater the capital structure and the smaller the Liquidity, the smaller the capital structure. The higher the company's ability to return its short-term obligations, the more liquid it is so that creditors' trust increases and makes it easier to obtain long-term debt. On the contrary, research (Dang et al., 2019) found that Liquidity hurts capital structure. In their research, the capital structure with a significant effect is described by the debt-capital and debt-asset ratios. Company characteristics (Liquidity) in research (Chin et al., 2021) significantly affect capital structure. Different company characteristics have different leverage rights to achieve the optimal capital structure.

Next is the cost of Capital, which is a major concern of managers when deciding on the firm's capital structure. The influence between the cost of Capital and financial structure is an important aspect of interest in the corporate finance literature. (Albanez, 2015) examined the impact of the cost of Capital on corporate financing decisions and capital structure. Their findings show that many firms argue the pecking order theory by giving preference to debt financing when the cost of equity capital is high in the capital market. However, the decision-making criteria are based on more than just the order suggested by the pecking order but depend on the costs of other sources of financing. Since the cost of Capital is an important deduction from accounting profit and further affects a firm's financing decisions and value, it pressures managers to find ways to utilize Capital efficiently. The cost of Capital refers to the financial costs borne by the firm and the minimum expected return that an investment project must earn to increase the firm's value. The cost of Capital has a fundamental role in determining the target capital structure. It is calculated by the weighted average cost of Capital (WACC). All value-maximizing firms strive to achieve their target capital structure that lowers the cost of Capital and increases firm value and future stock price appreciation (Brigham & Houston, 2012). Thus the cost of Capital is an important factor in determining the optimal capital structure.

The cost of Capital is found to have a mediating role in the effect of corporate governance and capital structure. (Javaid et al., 2023) found that the cost of Capital partially mediates the influence between corporate governance and capital structure decisions in sample companies. This finding aligns with the agency theory argument that effective governance strategies, by reducing information asymmetry and agency costs, can reduce the cost of Capital, which ultimately encourages companies to restructure their financing mix. The mediating role of the cost of Capital on the effect of institutional ownership on capital structure, theoretically, can be explained that the implementation of corporate governance mechanisms, especially through good institutional ownership, can reduce the company's cost of Capital because there is a stricter level of supervision by institutional shareholders on management in determining the company's funding sources, this will reduce the cost of Capital and will have a major impact on the optimal capital structure. Significant institutional ownership can also encourage companies to reduce debt because institutional ownership tends to appreciate a more conservative capital structure. This may affect the firm's capital structure by reducing the debt level relative to equity.

The cost of Capital can also mediate the effect of profitability and Liquidity on capital structure, where high profitability and Liquidity increase the company's ability to obtain loans at lower interest rates or equity capital at a lower cost. Companies that generate good profits are considered more reliable and can repay loans well. Thus, high profitability can help reduce the company's cost of Capital, which can affect the capital structure by reducing dependence on debt. (Febiyanti & Hersugondo, 2022) Found that the cost of Capital has a role that fully mediates the influence between corporate governance and profitability.

Based on the results of previous studies it identifies that there is still a research gap in the independent variables that affect the capital structure. This study fills the research gap in corporate finance literature by validating the existing influence between institutional ownership, profitability, Liquidity, and capital structure with the cost of Capital as a mediator variable. Therefore, this study aims to determine and analyze the effect of institutional ownership and firm characteristics on capital structure and the mediating role of capital cost in analyzing the impact of institutional ownership and firm characteristics on capital structure with capital cost as a mediating variable. So the benefit of this research is contributing to the development of science, especially in corporate finance literature related to capital structure and the role of cost of Capital as a mediating variable. In addition, the results of this study are expected to be a reference for business practitioners and financial managers in making decisions related to a more optimal capital structure policy by considering the influence of institutional ownership, profitability, Liquidity, and cost of Capital. This study also provides a deeper insight into the importance of internal company factors in influencing strategic financial decisions.

## METHOD

The paradigm used in this research is the positivistic paradigm, which uses quantitative research. The study population was 92 Property and Real Estate companies listed on the Indonesia Stock Exchange from 2018 to 2022. The sampling technique used was purposive sampling. The data analysis techniques used in this study are the classic assumption test and hypothesis testing.

## RESULTS AND DISCUSSION

### Normality Test

The results of model 1 testing can be explained as follows:

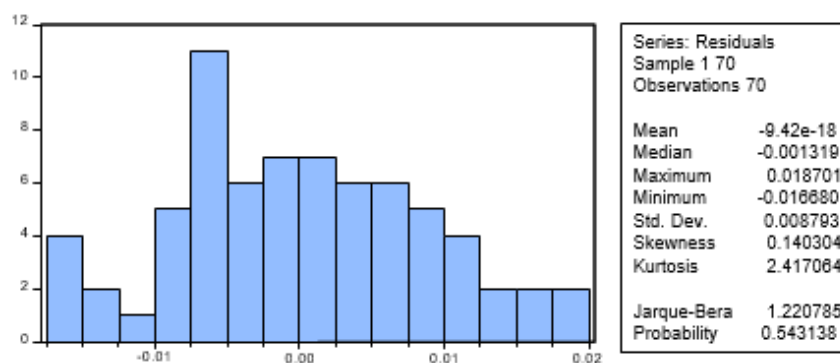


Figure 2. Model 1 Normality Test Results

Source: Data Processing with Eviews (2024)

In Figure 2, it can be explained that the Jarque Bera value of 1.220785 with a probability value of 0.543138 is greater than 0.05, so it can be said that the data in Model 1 is normally distributed. The results of Model 2 normality testing can be seen in the following figure:

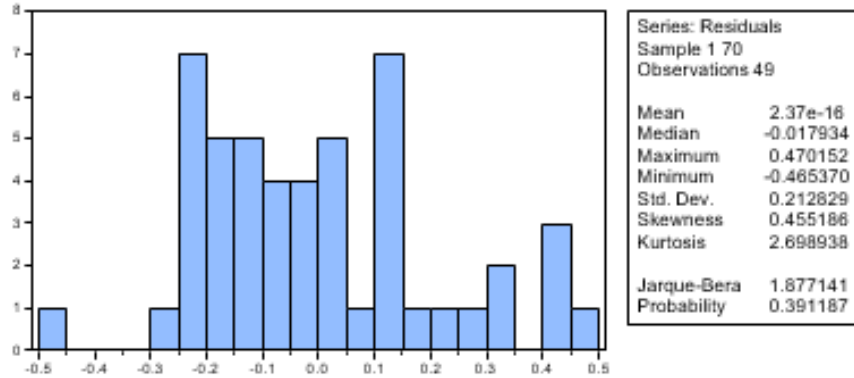


Figure 3. Model 2 Normality Test Results

Source: Data Processing with Eviews (2024)

In Figure 3, the Jarque Bera value of 17.32213 with a probability value of 0.000173 is smaller than 0.05, so the data in Model 2 is not normally distributed.

The test results of Model 3 can be explained as follows.

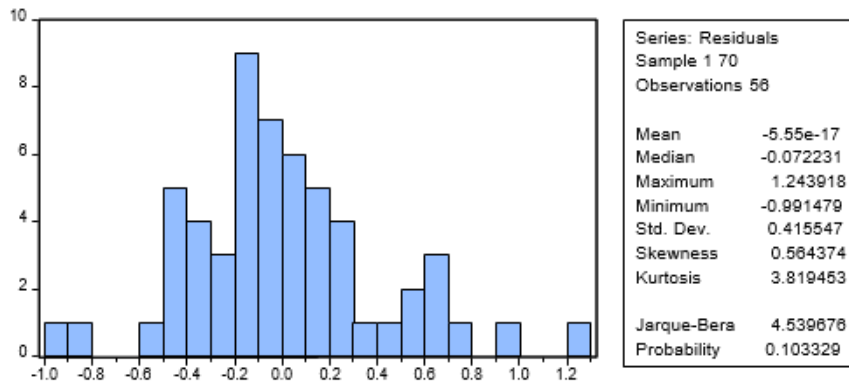


Figure 4. Model 3 Normality Test Results

Source: Data Processing with Eviews (2024)

In Figure 4, the Jarque Bera value of 4.539676 with a probability value of 0.103329 is greater than 0.05, so the data in Model 3 is normally distributed.

**Multicollinearity Test Results**

Table 1. Multicollinearity Test Results

	Variables	VIF	Conclusion
Model 1	INTS	1.233151	No Multicollinearity
	ROA	1.212378	
	CR	1,021776	
Model 2	INTS	1.521118	Not Occurring Multicollinearity
	ROA	2.759800	
	CR	1.010488	
Model 3	WACC	2.614830	No Multicollinearity
	INTS WACC	5,407422	
	ROA MACC	5.573233	
	CR WACC	2,392719	

Based on Table 1 above, it can be explained that the multicollinearity test results in Model 1 show that Institutional Ownership, Profitability and Liquidity obtained VIF values < 10. These results indicate that each variable is not correlated with each other or that there is no multicollinearity problem in Model 1.

The multicollinearity test results in Model 2 show that Institutional Ownership, Profitability, Liquidity, and cost of Capital obtained VIF values < 10. These results indicate that each variable is not correlated with each other or that there is no multicollinearity problem in Model 2.

The multicollinearity test results in Model 3 show that each independent variable obtained a VIF value <10. These results indicate that each variable is not correlated with each other or that there is no multicollinearity problem in Model 3.

**Heteroscedasticity Test Results**

**Table 2. Heteroscedasticity Test Results**

	Prob Obs*R- Squared	Description
Model 1	0,0711	No Heteroscedasticity Problem
Model 2	0,0939	No Heteroscedasticity Problem
Model 3	0,1716	No Heteroscedasticity Problem

Source: Data Processing with Eviews (2024)

The results of the heteroscedasticity test show that the heteroscedasticity test in model 1 obtained a Prob. Obs\*R—Squared of 0.0711 is greater than 0.05. These results conclude that there is no heteroscedasticity problem in Model 1.

The results of the heteroscedasticity test in Model 2 obtained a Prob. Obs\*R-Squared value of 0.0939 is greater than 0.05. These results conclude that there is no heteroscedasticity problem in Model 2.

The results of the heteroscedasticity test in Model 3 obtained a Prob. Obs\*R-Squared value of 0.176 is greater than 0.05. These results conclude that there is no heteroscedasticity problem in Model 3.

**Autocorrelation Test Results**

**Table 3. Autocorrelation Test Results**

	Durbin Watson	Description
<b>Model 1</b>	1,103812	No autocorrelation
<b>Model 2</b>	1.316349	No autocorrelation
<b>Model 3</b>	0,912133	No autocorrelation

Source: Data Processing with Eviews (2024)

The results of the autocorrelation test in Table 3 above show that there is no autocorrelation between each model. This is because each model (Model 1, Model 2, and Model 3) has a Durbin Watson value between -2 and + 2.

**Regression Analysis of Research Data**

**Table 4. Panel Data Regression Test Results Model 1**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.020267	0.003779	5.363662	0.0000
INTS	0.009737	0.007547	1.290149	0.2026
ROA	0.995690	0.029437	33.82482	0.0000
CR	-0.001118	0.000582	-1.920820	0.0601

Source: Data Processing with Eviews (2024)

In Table 4 above, the regression equation for Model 1 can also be made as follows:

$$WACC = 0.020267 + 0.009737 INTS + 0.995690 ROA - 0.001118 CR + e$$

Based on the Model 1 equation above, it can be interpreted as follows:

- A (coefficient) = 0.020267 indicates that if Institutional Ownership, Profitability and Liquidity do not exist or have a value of 0, the Cost of Capital will be fixed at 0.020267.
- Beta INTS = 0.009737 indicates that if there is an increase in the Institutional Ownership variable by one unit, the Cost of Capital will increase by 0.009737.
- Beta ROA = 0.995690 indicates that if the Profitability variable increases by one unit, the Cost of Capital will increase by 0.995690.
- Beta CR = -0.001118 indicates that if the Liquidity variable increases by one unit, the Cost of Capital decreases by -0.001118.
- Furthermore, Table 4.20 below shows the regression test results on Model 2, which has been selected and will be used as the fixed-effect model.

**Table 5. Panel Data Regression Test Model 2**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.569968	0.070743	8.056912	0.0000
INTS	-0.068322	0.086788	-0.787229	0.4369
ROA	-4.670964	2.081871	-2.243638	0.0319
CR	-0.011501	0.007267	-1.582594	0.1233
WACC	5.004014	2.059656	2.429539	0.0209

Source: Data Processing with Eviews (2024)

In Table 5 above, the regression equation for Model 2 can also be made as follows:

$$DER = 0.569968 - 0.068322 INTS - 4.670964 ROA - 0.011501 CR + 5.004014 WACC + e$$

Based on the Model 2 equation above, it can be interpreted as follows:

- A (coefficient) = 0.569968 indicates that if Institutional Ownership, Profitability, Liquidity and Cost of Capital do not exist or are worth 0, then the Capital Structure will be fixed at 0.569968.
- Beta INTS = -0.068322 indicates that if the Institutional Ownership variable increases by one unit, then the Capital Structure will decrease by -0.068322.
- Beta ROA = -4.670964 indicates that if the Profitability variable increases by one unit, the Capital Structure will decrease by -4.670964.
- Beta CR = -0.011501 indicates that if the Liquidity variable increases by one unit, the Capital Structure will decrease by -0.011501.
- Beta WACC = 5.004014 indicates that if the Cost of Capital variable increases by one unit, the Capital Structure will increase by 5.004014.

The regression test results on Model 3, which has been selected and will be used as the random effect model, can be seen in Table 6 below.

**Table 6. Panel Data Regression Test Results Model 3**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.798767	0.125095	6.385288	0.0000
INTS_WACC	-2.054376	1.417986	-1.448798	0.1534
ROA_MACC	13.66074	6.073562	2.249214	0.0288
CR_WACC	-0.401468	0.188680	-2.127776	0.0381

Source: Data Processing with Eviews (2024)

In Table 6 above, the regression equation for Model 3 can be made as follows:

$$DER = 0.798767 - 2.054376 INTS*WACC + 13.66074 ROA*WACC - 0.401468 CR*WACC + e$$

Based on the Model 3 equation above, it can be interpreted as follows:

- a. A (coefficient) = 0.798767 indicates that if Institutional Ownership, Profitability and Liquidity mediated by Capital Cost does not exist or is is worth 0,, then the Capital Structure will be fixed at 0.798767.
- b. Beta INTS\*WACC = -2.054376 shows that if the Institutional Ownership variable mediated by Capital Cost increases by one unit, the Capital Structure will decrease by -2.054376.
- c. Beta ROA\*WACC = 13.66074 shows that if the Profitability variable with mediated Capital Cost increases by one unit, then the Capital Structure will increase by 13.66074.
- d. Beta CR\*WACC = -0.401468 shows that if there is an increase in the Liquidity variable mediated by Capital Cost by one unit, the Capital Structure will decrease by - 0.401468.

**Hypothesis Test Results**

**Coefficient of Determination Results**

**Table 7. Coefficient of Determination**

	Adjusted R Square
Model 1	0.984251
Model 2	0.980336
Model 3	0.090634

Source: Data Processing with Eviews (2024)

Based on the results of testing the coefficient of determination, the Adjusted R-Square value in Model 1 is 0.984251 or 98.4%. This means that the variables of Institutional Ownership, Profitability, and Liquidity are proven to influence the Cost of Capital by 98.4% jointly. While the remaining 1.6% is influenced by other variables outside the research model not used in this study.

The results of testing the coefficient of determination of Model 2 show an Adjusted R-Square value of 0.980336, or 98.0%. This means that the variables of Institutional Ownership, profitability, Leverage, and Capital Cost simultaneously affect the Capital Structure by 98.0%, and 2.0% is influenced by other variables outside the research model that are not used in this study.

The results of testing the coefficient of determination of Model 3 show an Adjusted R-square value of 0.090634 or 9%. This means that the variables of Institutional Ownership, profitability, and leverage with mediated Capital Cost simultaneously affect the Capital Structure by 9%, and 91% is influenced by other variables outside the research model that are not used in this study.

**F or Anova Test Results**

**Table 8. The hypothesis with the F Test**

	F Statistics	Significant	Conclusion
Model 1	270.5102	0.000000	Simultaneously Affected
Model 2	150.5599	0.000000	Simultaneously Affected
Model 3	2.827223	0.047459	Simultaneously Affected

Source: Data Processing with Eviews (2024)

Based on Table 8, the F test results in Model 1 produce a significant value of 0.000000 <0.05. These results indicate that Institutional Ownership, Profitability and Liquidity variables simultaneously affect the Cost of Capital.

Furthermore, Model 2 produces a significant value of  $0.000000 < 0.05$ . The result shows that the Institutional Ownership variable. Profitability, Liquidity and Capital Cost simultaneously affect the Capital Structure.

The result of the F test in Model 3 produces a significant value of  $0.047459 < 0.05$ . The result shows that Institutional Ownership, Profitability and Liquidity mediated by Capital Cost simultaneously affect the Capital Structure.

**The result of the test (Partial Hypothesis)**

**Table 9. t Test Results (Partial Hypothesis)**

	Hypothesis	Predicted Direction	t count	Prob. One-Tailed	Conclusion
H1	INST → DER	-	-0.787229	0.2185	Hypothesis Rejected
H2	ROA → DER	-	-2.243638	0.0160	Hypothesis Accepted
H3	CR → DER	-	-1.582594	0.0617	Hypothesis Rejected
H4	INST → WACC	-	1.290149	0.1013	Hypothesis Rejected
H5	ROA → WACC	-	33.82482	0.0000	Hypothesis Rejected
H6	CR → WACC	-	-1.920820	0.0301	Hypothesis Accepted
H7	WACC → DER	+	2.429539	0.0105	Hypothesis Accepted

Source: Results of Data Processing with SPSS (2024)

Based on Table 9 above, each hypothesis can be explained as follows:

1) First Hypothesis (H1)

The first hypothesis (H1) tests whether Institutional Ownership significantly negatively affects Capital Structure in Property Companies listed on the IDX in 2018 - 2022. The null hypothesis (Ho) and alternative hypothesis (Ha) are as follows:

Ho1: Institutional Ownership has no significant negative effect on Capital Structure.

Ha1: Institutional Ownership has a significant negative effect on Capital Structure

Based on the t-test results in Table 9, the t-value is  $-0.787229$  and significant at  $0.2185 > 0.05$ . These results show a negative and insignificant relationship. Thus, the first hypothesis (Ha1) is rejected. It means that Institutional Ownership has no significant negative effect on Capital Structure.

2) Second Hypothesis (H2)

The second hypothesis (H2) tests whether Profitability significantly negatively affects Capital Structure in Property Companies listed on the IDX in 2018 - 2022. The null hypothesis (Ho) and alternative hypothesis (Ha) are as follows:

Ho2: Profitability has no significant negative effect on Capital Structure

Ha2: Profitability has a significant negative effect on Capital Structure

Based on the t-test results in Table 9, the t-value is  $-2.243638$  and significant at  $0.0160 < 0.05$ . Based on these results, it shows a negative and significant relationship. Thus, it can be concluded that the second hypothesis (Ha2) is accepted. That is, Profitability is proven to affect Capital Structure significantly negatively.

3) Third Hypothesis (H3)

The third hypothesis (H3) tests whether Liquidity significantly negatively affects Capital Structure in Property Companies listed on the IDX in 2018 - 2022. The null hypothesis (Ho) and alternative hypothesis (Ha) are as follows:

Ho3: Liquidity does not have a significant negative effect on Capital Structure

Ha3: Liquidity has a significant negative effect on Capital Structure

Based on the t-test results in Table 9, the t-value is -1.582594 and significant at  $0.0617 > 0.05$ . Based on these results, it shows a negative and insignificant relationship. Thus, it can be concluded that the third hypothesis (Ha3) is rejected. That is, Liquidity has no significant negative effect on Capital Structure.

4) Fourth Hypothesis (H4)

The fourth hypothesis (H4) tests whether Institutional Ownership significantly negatively affects the Cost of Capital in Property Companies listed on the IDX in 2018 - 2022.

The null hypothesis (Ho) and alternative hypothesis (Ha) are as follows:

Ho4: Institutional Ownership does not have a significant negative effect on the Cost of Capital

Ha4: Institutional Ownership has a significant negative effect on the Cost of Capital

The t-test results in Table 9 show that the t-value is 1.290149 and significant at  $0.1013 > 0.05$ . These results show a positive and insignificant relationship. Thus, it can be concluded that the fourth hypothesis (Ha4) is rejected. This means that Institutional Ownership has no significant negative effect on the Cost of Capital.

5) Fifth Hypothesis (H5)

The fifth hypothesis (H5) tests whether Profitability significantly negatively affects the Cost of Capital in Property Companies listed on the IDX in 2018 - 2022. The null hypothesis (Ho) and alternative hypothesis (Ha) are as follows:

Ho5: Profitability does not have a significant negative effect on the Cost of Capital

Ha5: Profitability has a significant negative effect on the Cost of Capital

Based on the t-test results in Table 9, the t-value is 33.82482 and significant at  $0.0000 < 0.05$ . Based on these results, it shows a significant positive relationship. Seeing the prediction of the negative hypothesis direction, the fifth hypothesis (Ha5) is rejected. That is, Profitability has a significant positive effect on the Cost of Capital.

6) Sixth Hypothesis (H6)

The sixth hypothesis (H6) tests whether Liquidity significantly negatively affects the Cost of Capital in Property Companies listed on the IDX in 2018 - 2022. The null hypothesis (Ho) and alternative hypothesis (Ha) are as follows:

Ho6: Liquidity does not have a significant negative effect on the Cost of Capital

Ha6: Liquidity has a significant negative effect on the Cost of Capital

Based on the t-test results in Table 9, the t-value is -1.920820 and significant at  $0.0301 < 0.05$ . Based on these results, it shows a significant negative relationship. From these results, it is concluded that the sixth hypothesis (Ha6) is accepted. That is, Liquidity significantly negatively affects the Cost of Capital.

7) Seventh Hypothesis (H7)

The seventh hypothesis (H7) tests whether the Cost of Capital significantly positively affects the Capital Structure of Property Companies listed on the IDX in 2018 - 2022. The null hypothesis (Ho) and alternative hypothesis (Ha) are as follows:

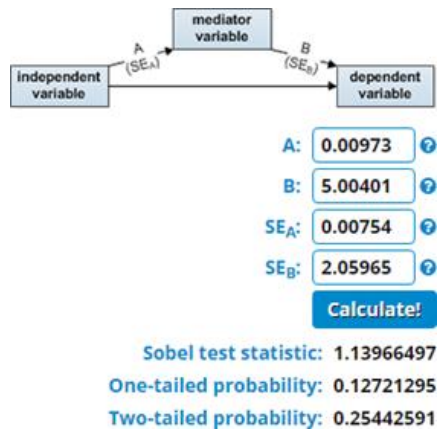
Ho7: Cost of Capital has no significant positive effect on Capital Structure

Ha7: Cost of Capital has a significant positive effect on Capital Structure

Based on the t-test results in Table 9, the t-value is 2.429539 and significant at  $0.0105 < 0.05$ . Based on these results, it shows a positive and significant relationship. Thus, it can be concluded that the seventh hypothesis (Ha7) is accepted. This means that the Cost of Capital is proven to have a significant positive effect on Capital Structure.

**Path Analysis**

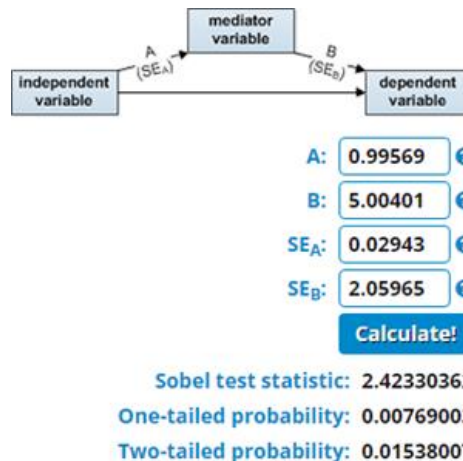
The Sobel test results are as follows:



**Figure 5. Sobel Test Calculation Results Model 1**

The Sobel test results in Model 1 obtained a Sobel test statistic value of 1.13966497 with a one-tailed probability of 0.1272195 greater than 0.05. Thus, the eighth hypothesis (Ha8) is rejected. It means that Capital Cost cannot mediate Institutional Ownership of Capital Structure in a positive direction.

Model 2 aims to determine whether the Cost of Capital mediates the effect of Profitability on Capital Structure. The Sobel test results are as follows:



**Figure 6. Sobel Test Calculation Results Model 2**

The results of the Sobel test on Model 2 obtained a Sobel test statistic value of 2.42330362 with a one-tailed probability of 0.00769003 smaller than 0.05. Thus, the ninth hypothesis (Ha9) is accepted. It means that Capital Cost can mediate Profitability to Capital Structure in a positive direction.

Model 3 aims to determine whether the Cost of Capital mediates the effect of Liquidity on Capital Structure. The Sobel test results are as follows:

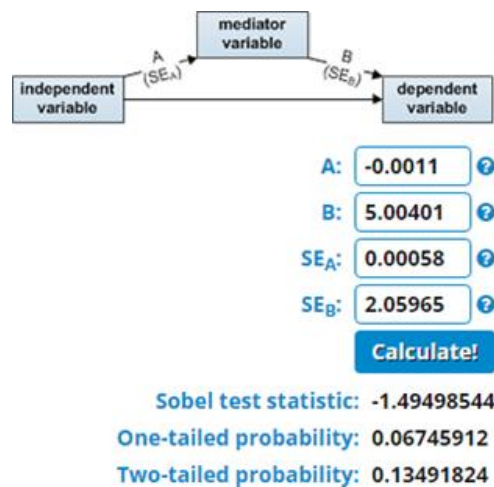


Figure 7. Sobel Test Calculation Results Model 3

The Sobel test results in Model 3 obtained a Sobel test statistic value of -1.49498544 with a one-tailed probability of 0.06745912 greater than 0.05. Thus, the tenth hypothesis (Ha10) is rejected. It means that Capital Cost cannot mediate Liquidity toward Capital Structure with positive direction.

#### Effect of Institutional Leadership on Capital Structure

The results of the first hypothesis show that Institutional Ownership has no significant negative effect on Capital Structure in Property Companies listed on the IDX in 2018 - 2022. This study's results indicate that institutional ownership does not significantly reduce or negatively affect the company's capital structure. Capital structure refers to the proportion of debt and equity a company uses to finance its operations. Thus, this finding implies that the presence of institutional shareholders does not significantly worsen the firm's capital structure. One interpretation of this result is that firms may have better financial independence, which means they are less dependent on debt as a funding source. This study's results align with the research of (Khafid et al., 2020) shows that managerial ownership and institutional ownership have no significant effect on capital structure. The hypothesis results contradict the research results (Choi et al., 2020) and (Gustyana & Hanari, 2022) which prove that institutional ownership has a negative and significant effect on capital structure. These results explain that institutional ownership does not significantly reduce or negatively affect the company's capital structure, so it has no impact on reducing the capital structure, in this case, the DER ratio.

#### Effect of Profitability on Capital Structure

The results of the second hypothesis show that Profitability significantly negatively affects Capital Structure in Property Companies listed on the IDX in 2018 - 2022. This study's results indicate that an increase in profitability will affect the decrease in Capital Structure in Property Companies listed on the IDX in 2018 - 2022. Companies can generate high levels of profitability and tend to have more internal funds available to support their operations and expansion, thereby reducing dependence on external debt. Hypothesis results support research (Putri, 2016), proving that profitability negatively and significantly influences capital structure. (Oktaviana & Taqwa, 2021) state that the higher the profitability, the lower the possibility of the company using debt financing. (Muntahanah et al., 2021) Revealed that the higher the profit, the use of external funds or funding

from debt will decrease; in other words, the higher the level of profitability will reduce the company's capital structure. This is because the company has sufficient internal sources of funds to be able to fulfill the company's operational activities.

#### **Effect of Liquidity on Capital Structure**

The results of the third hypothesis show that Liquidity has no significant negative effect on the Capital Structure of Property Companies listed on the IDX in 2018 - 2022. The results of this study indicate that the company's liquidity level does not significantly impact lowering the Capital Structure of Property Companies listed on the IDX in 2018-2022. In this context, the level of Liquidity, which refers to the company's ability to meet its short-term obligations quickly using available assets, does not significantly reduce or affect how property companies manage their debt ratios. This study's results align with research conducted by (Prastika & Candradewi, 2019), who found that Liquidity has no significant negative effect on Capital Structure.

According to the pecking order theory, the company prefers to use internal fund sources because the company with high Liquidity can pay short-term debt according to its maturity and will reduce the amount of debt so that the capital structure will be smaller. On the other hand, the lower the Liquidity of the company, the more difficult it is to pay its short-term debt (Rahmawati & Sapari, 2021). In this study, the level of Liquidity tends to be insignificant in using relatively low debt. Therefore, Liquidity has no significant negative effect on Capital Structure.

#### **The Effect of Institutional Ownership on the Cost of Capital**

The results of the fourth hypothesis show that Institutional ownership has no significant negative effect on the cost of Capital in Property Companies listed on the IDX in 2018 - 2022. These results indicate that the company's institutional ownership level does not significantly impact lowering the cost of Capital in Property Companies listed on the IDX in 2018-2022. In this context, more than institutional ownership is needed to create further pressure on company management to run operations efficiently and produce better results in minimizing uncertainty, increasing investor confidence and reducing capital costs. According to (Rebecca & Siregar, 2012)(Rebecca & Siregar, 2012), institutional ownership does not always reduce the company's cost of Capital because institutional investors do not effectively carry out their proper functions and rights. The main functions of institutional investors include monitoring and supervising the performance of companies in which they own shares and influencing strategic decisions to increase the value of long-term investments. Brightman & Houtson (2011) explain that the cost of Capital reflects the rate of return that investors demand security for the company, so it can be interpreted that the cost of Capital of a company is the part that the company must spend to give satisfaction to its investors at a certain level of risk. This study's results align with research (Meilisa, 2020), which found that institutional ownership has no significant effect on the cost of equity capital. The same results are shown by (Rebecca & Siregar, 2012), who found that institutional ownership has no significant effect on the cost of Capital.

#### **Effect of Profitability on Cost of Capital**

The results of the fifth hypothesis show that profitability has a significant positive effect on the Cost of Capital in Property Companies listed on the IDX in 2018 - 2022. These results indicate that the higher the company's profitability, the higher the cost of Capital. Brightman & Houtson (2011) explain that the cost of Capital reflects the rate of return that investors demand security for

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the company, so it can be interpreted that the cost of Capital of a company is the part that the company must spend to give satisfaction to its investors at a certain level of risk. In this context, when the company experiences greater profits, this can result in investors demanding a higher rate of return so that the higher the company's profitability, the higher the cost of Capital in Property Companies listed on the IDX in 2018 - 2022. The hypothesis contradicts the research results (Caisari & Herawaty, 2019), which state that the higher the profitability, the lower the cost of Capital.

#### **Effect of Liquidity on Cost of Capital**

The sixth hypothesis results show that Liquidity significantly negatively affects the cost of Capital in Property Companies listed on the IDX in 2018 - 2022. This study's results indicate that an increase in Liquidity will affect the decrease in the Cost of Capital in Property Companies listed on the IDX in 2018 - 2022. According to (Caisari and Herawaty, 2019), companies with high Liquidity tend to rely on internal funding sources and, therefore, require less debt, affecting their equity capital cost. In this context, a high level of Liquidity is a sign that the company can meet its short-term obligations. This can reduce financial risk, and investors may see it as a positive signal, reducing the cost of Capital. This study's results align with research (Efrina & Faisal, 2017), which found that the level of Liquidity has a significant negative effect on the cost of equity capital. With increasing Liquidity, the lower the cost of equity capital. The same results are shown by (Bley et al., 2019). His research found that Liquidity significantly negatively affects the cost of equity capital.

#### **Effect of Cost of Capital on Capital Structure**

The results of the seventh hypothesis show that the cost of Capital significantly positively affects the capital structure of Property Companies listed on the IDX in 2018 - 2022. The results of this study indicate that if the cost of Capital increases, it will affect the increase in the capital structure of Property Companies listed on the IDX in 2018-2022. In this context, a high cost of equity capital will encourage companies to raise more equity.

Use debt in their capital structure. This can happen because the high cost of equity capital makes funding through shares more expensive. Instead, companies tend to choose to use debt to finance their assets. Research (Javaid et al., 2023) in their research results provide evidence that the cost of Capital can positively impact capital structure. This result is in line with (Albanez, 2015), which asserts that when the cost of equity capital is high, they finance their investment with debt. That is, when the cost of equity capital is high, companies tend to choose debt capital as an alternative to minimize the overall cost of Capital.

#### **Cost of Capital Mediates the Effect of Institutional Ownership on Capital Structure**

The results of the eighth hypothesis show that the cost of Capital cannot mediate institutional ownership on capital structure with a positive direction in Property Companies listed on the IDX in 2018 - 2022. These results indicate that the correlation of a capital variable's cost cannot mediate between institutional ownership and the capital structure to reduce the use of funding through debt. This is because institutional investors do not effectively carry out their functions and rights that should reduce the cost of Capital. According to (Rifanda, 2020), high institutional ownership can reduce the company's cost of Capital, and the cost of Capital can then influence the company's decision not to use debt funding sources. This finding provides evidence that institutional investors play an important role in optimally influencing the cost of Capital to mediate the relationship between institutional ownership and capital structure. This result supports research (Meilisa, 2020),

which found that institutional ownership has no significant effect on the cost of equity capital. According to (Rebecca & Siregar, 2012), institutional ownership does not always reduce the company's cost of Capital because institutional investors do not effectively carry out their proper functions and rights. The main functions of institutional investors include monitoring and supervising the performance of companies in which they own shares and influencing strategic decisions to increase the value of long-term investments.

**Cost of Capital Mediates the Effect of Profitability on Capital Structure.**

The results of the ninth hypothesis show that the cost of Capital can mediate Profitability on Capital Structure with a positive direction in Property Companies listed on the IDX in 2018 - 2022. These results indicate that the correlation of capital cost variables can mediate between profitability and capital structure to reduce the use of funding through debt. According to (Peter & Tanadi, 2020), the higher the profit, the greater the potential for companies to use retained earnings as funding; this reduces the cost of Capital to be lower, so the impact on the company's capital structure decreases. These findings are consistent with the pecking order theory proposed by (Myers and Majluf, 1984). Pecking order theory states that firms have preferences in choosing funding sources and tend to use internal funding sources first before switching to external funding. That is, companies prefer to use their internal funds, such as retained earnings or available cash, as their main funding source. This approach can reduce the company's cost of Capital, affecting its capital structure with lower debt levels. The results of this study align with research (Arifin & Fitriana, 2022) that found that the cost of Capital can mediate between Leverage on profitability, profitability, debt, and capital structure have an influence between one variable and another.

**Cost of Capital Mediates the Effect of Liquidity on Capital Structure.**

The results of the tenth hypothesis show that the cost of Capital cannot mediate Liquidity on Capital Structure with a positive direction in Property Companies listed on the IDX in 2018 - 2022. These results indicate that the correlation of capital cost variables cannot mediate between Liquidity and capital structure to reduce the use of funding through debt. In this study, the mediation correlation can be influenced by two supporting relationships, namely, if Liquidity can negatively affect the cost of Capital and capital structure. In this study, the level of Liquidity tends to be insignificant in using relatively low debt. At the same time, the partial result on the cost of Capital shows a negative effect. Therefore, although Liquidity affects the decrease in the cost of Capital in Property Companies listed on the IDX in 2018 - 2022, in this case, it cannot play a mediating role between Liquidity and capital structure to reduce the use of funding through debt. The results of this study support research (Zulkarnain, 2020), which found that Liquidity has no significant negative effect on Capital Structure. The results of this hypothesis contradict research (Septiani & Suaryana, 2018), which states that the cost of Capital mediates the effect of Liquidity on capital structure.

**CONCLUSION**

Based on the test results, there are several important findings related to property companies listed on the Indonesia Stock Exchange (IDX) from 2018 to 2022. First, institutional ownership has no significant negative effect on capital structure or cost of Capital. Second, profitability shows a significant negative effect on capital structure, but has a significant positive effect on the cost of Capital. Third, Liquidity has no significant negative effect on capital structure, but has a significant

negative effect on the cost of Capital. Fourth, the cost of Capital is proven to have a significant positive influence on capital structure. In addition, the cost of Capital cannot mediate the effect of institutional ownership and Liquidity on capital structure with a positive direction. However, it can mediate the effect of profitability on capital structure in a positive direction. The findings provide an in-depth insight into the factors that influence capital structure and cost of Capital in the property sector during the period.

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