

## THE EFFECT OF LIQUIDITY, ASSET STRUCTURE AND COMPANY SIZE ON CAPITAL STRUCTURE WITH COMPANY ROA AS INTERVENING VARIABLES IN PLANTATION SUB SECTOR COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE

Ridho Tanso Rikalmi<sup>1)</sup>, Danar Irianto<sup>2)</sup>

<sup>1</sup>Business Management, Politeknik Negeri Batam, Batam, Indonesia  
email: [ridho@polibatam.ac.id](mailto:ridho@polibatam.ac.id)

<sup>2</sup>Business Management, Politeknik Negeri Batam, Batam, Indonesia  
email: [danar@polibatam.ac.id](mailto:danar@polibatam.ac.id)

### ABSTRACT

*The aim of this research is to empirically confirm the impact of Liquidity, Asset Structure, and Firm Size on Capital Structure where Return on Assets (ROA) would serve as the mediator. Here, liquidity specifies the company's capability to meet short-term obligations, asset structure and firm size specify the composition and range of the firm's business that can influence financing. This research uses all listed firms in the agricultural sub-sector on the Indonesia Stock Exchange (IDX) for the period 2016-2019, with 19 observations. Parametric and non-parametric statistical techniques are employed for data analysis to examine the study variables. The steps to the analysis include the use of normality tests to confirm the appropriate distribution of data, and hypothesis testing to verify the variable relationships. Additionally, this research includes the results of the hypotheses tests and employs Path Analysis to ascertain the pathways of influence of the variables. The outcomes of this research will be in a position to provide better understanding of the determinants of the capital structure of companies operating in the agricultural sector, as well as the role of ROA as an intervening variable in such a relationship. These findings are anticipated to serve as a guide for company management in decision-making regarding funding policy and asset management.*

**Keywords:** liquidity, return on assets, asset structure, capital structure, company size.

### ABSTRAK

Tujuan dari penelitian ini adalah untuk membuktikan secara empiris pengaruh dari Likuiditas, Struktur Aset, dan Ukuran Perusahaan terhadap Struktur Modal dengan Return on Assets (ROA) sebagai variabel intervening. Di sini, likuiditas menunjukkan kemampuan perusahaan untuk memenuhi kewajiban jangka pendek, struktur aset dan ukuran perusahaan menunjukkan komposisi dan jangkauan bisnis perusahaan yang dapat mempengaruhi pembiayaan. Penelitian ini menggunakan data perusahaan yang terdaftar di sub-sektor pertanian Bursa Efek Indonesia (BEI) untuk periode 2016-2019, dengan 19 observasi. Teknik statistik parametrik dan non-parametrik digunakan untuk analisis data guna menguji variabel-variabel studi. Langkah-langkah analisis mencakup penggunaan uji normalitas untuk mengonfirmasi distribusi data yang sesuai, dan pengujian hipotesis untuk memverifikasi hubungan antar variabel. Selain itu, penelitian ini mencakup hasil pengujian hipotesis dan menggunakan Analisis Jalur untuk menentukan jalur pengaruh variabel-variabel tersebut. Hasil penelitian ini diharapkan dapat memberikan pemahaman yang lebih baik tentang faktor-faktor yang menentukan struktur modal perusahaan yang beroperasi di sektor pertanian, serta peran ROA sebagai variabel intervening dalam hubungan tersebut. Penelitian ini diharapkan dapat menjadi panduan bagi manajemen perusahaan dalam pengambilan keputusan terkait kebijakan pendanaan dan manajemen aset.

**Kata kunci:** likuiditas, return on assets, struktur aset, struktur modal, ukuran perusahaan.

## 1. INTRODUCTION

Capital structure is one of the fundamental aspects of corporate financial management, denoting the combination of debt and equity that is utilized to finance the company's assets. Capital structure decisions are significant, as they may affect financial performance and firm value. In the Indonesian plantation sector, which is a strategic industry for the national economy, the significance of analyzing the determinants of capital structure is even greater.

There are several parameters that are believed to have an influence on a company's capital structure, including asset structure, liquidity and company size. High liquidity, according to Al-Najjar and Taylor (2019), A company with good liquidity will have a greater ability to manage financial risks and settle its short-term debts. In addition, asset composition, which is the combination of fixed and current assets, also plays a significant role in determining the extent of debt that can be utilized by a business. According to evidence presented by Huang and Song (2019), companies with a greater proportion of fixed assets have a higher capital structure as fixed assets can be collateral for debt. Firm size is also widely associated with the prospect of access to external finance. Abor's (2019) research shows that larger companies have improved access to capital markets, and this may influence capital structure decision. Larger companies are often related to increased stability and better reputation, which may enhance creditor confidence. Return on Assets (ROA) as a measure of profitability of a firm can also serve as an intervening variable between these determinants and capital structure.

ROA shows how efficiently the firm is able to generate profit with its total assets. Research carried out by Azhari et al. (2019) verifies that higher profitability will be related to higher usage of debt as more profitable companies will be in a better state to repay debt. Thus, ROA can strengthen the relationship between liquidity, firm size, asset structure and capital structure. This study aims to examine the effect of firm size, liquidity, asset structure on capital structure through ROA as an intervening

variable in plantation sub-sector companies listed in the Indonesia Stock Exchange during the years 2016-2019. With empirical data from the financial statements companies, this research is expected to show more interesting information on the dynamics of capital structure in the plantation sector and its implications for financial management practice. Through this research, it is hoped to make a contribution to the development of financial and accounting literature, as well as to provide practical recommendations to the management of firms in formulating more effective and efficient capital structure policies.

## 2. LITERATUR REVIEW

### 2.1. Profitabilitas

The most important attraction for shareholders of a company or firm owners is profitability. Profitability here is the result obtained from management action on the capital placed in the company. According to Mamduh M. Hanafi (2012:81), "This ratio measures the company's ability to generate profits at the sales, asset, or equity level. Three ratios that are frequently discussed are profit margin, return on asset (ROA), and return on equity (ROE).".

Kasmir (2015:114) states that "The Profitability Ratio is a ratio used to determine how well a firm is able to generate profits during a given duration. The efficiency of a company's management in terms of gains achieved from revenues or investment can also be found using the ratio. Return On Equity (ROA) shows a positive direction, indicating that ROA has a positive and significant impact on financial performance (Dalam, 2024)

Sudana (2011:22) states that The Profitability Ratio is the estimation of a company's capacity to generate profits with the available assets of the company, i.e., capital, assets, or sales. Return On Assets is an estimation of the overall capacity of a company to generate profits with the overall investment present in the company (Ambarwati et al., 2015:4).

## 2.2. Company Size

According to Brigham & Houston (2014:4), "Company size is a measure of the size of a company, which is indicated or measured by total assets, total sales, net income, tax expenses, and others." Hartono (2008:14) states, "The size of a company can be measured through total assets or the value of the company's wealth using the logarithmic calculation of total assets." Jogiyanto (2013:282) states, "Company size is a scale that can categorize the size of a company in many ways (total assets, log size, market value of shares, and others)." One thing we must understand is that if a company is large, it has a greater opportunity to obtain funding from various sources, and it will be easier to borrow from creditors, as larger companies have a greater chance of surviving in the industry.

## 2.3. Capital Structure

Capital structure plays a crucial role in shaping a company's strategic and operational decisions. An optimal capital structure reflects a well-balanced proportion between debt and equity, which determines how effectively a company can finance its activities and manage financial risk. According to Utami Laksita (2013), citing Fahmi (2015:184), capital structure describes the financial makeup of a company, specifically the proportion between long-term debt and shareholders' equity, both of which serve as key sources of corporate funding.

In practice, financial managers must consider various qualitative and quantitative factors when deciding the composition of capital structure. Qualitative aspects include the company's management style, level of risk tolerance, industry characteristics, and market perception, while quantitative considerations relate to the cost of capital, cash flow stability, and expected return on investment. An appropriate balance between debt and equity financing enables companies to minimize the cost of capital while maximizing shareholder value.

Furthermore, a sound capital structure enhances a company's credibility in the eyes of creditors and investors, influencing the ease of obtaining future funding. Companies with excessive debt may face higher interest burdens and financial distress, whereas firms relying solely on equity might dilute ownership and forgo potential tax benefits associated with debt financing. Therefore, determining an efficient capital structure is an ongoing process that requires continuous evaluation and adjustment in response to changes in internal conditions and external economic factors.

## 2.4. Liquidity

The application of liquidity ratios is also extensive among companies as well as investors in identifying how effectively a company can meet its obligations. They are primarily short-term such as payment of electricity bills, salaries to the employees, and debits falling due. The following is the definition of liquidity by various experts, According to Kasmir (2014:129), Liquidity (liquidity ratio) is a ratio describing or measuring the ability of a firm to pay short-term debt (obligations). That is, should a firm be called upon, then it will be able to pay such debts, especially those that fall due. By the same token, Fahmi (2012:174) illustrates liquidity as an image of a firm's ability to settle short-term obligations quickly and in good time, hence liquidity is explained as short-term liquidity. From the above explanations, it is thereby implied that liquidity ratios reflect the ability of a firm to repay short-term obligations quickly and at the right time.

## 2.5. Asset Structure

Asset structure refers to all the assets or funds available to a company to use in its operations. Asset structure refers to the composition of the assets owned by the company. Fixed assets ratio is a ratio of the number of fixed assets to total assets. This variable is used as a proxy for the asset structure variable, which is responsible for the ability of the firm to get access to debt based on the amount of fixed assets available for collateral (Dewiningrat & Mustanda, 2018).

## 2.6. Hypothesis Development

In this research there are 10 hypotheses which can be explained as follow :

**H1:** Liquidity has a positive and significant effect on profitability in companies.

**H2:** Asset structure has a positive and significant effect on profitability in companies.

**H3:** Company size has a positive and significant effect on profitability in companies.

**H4:** Liquidity has a positive and significant effect on capital structure in companies.

**H5:** Asset structure has a positive and significant effect on capital structure in companies.

**H6:** Company size has a positive and significant effect on capital structure in companies.

**H7:** Profitability has a positive and significant effect on capital structure in companies.

**H8:** Profitability is an intervening variable between liquidity and capital structure in companies.

**H9:** Profitability is an intervening variable between asset structure and capital structure in companies.

**H10:** Profitability is an intervening variable between company size and capital structure in companies.

## 3. RESEARCH METHODS

This study involves a qualitative approach in analyzing the data. Essentially, quantitative research is closely related to theory testing and measuring research variables in the form of numbers, as well as analyzing data using statistical procedures (Rumengan, 2013:10). In this research, the author will examine the effects of liquidity, asset structure, and firm size on capital structure, with profitability as an intervening variable in plantation sub sector companies listed on the Indonesia Stock Exchange for the years 2016-2019.

## 4. RESULT & DISCUSSION

### Normality Test

Decision rule of the Kolmogorov-Smirnov test about whether the data is almost normally distributed can be seen from Asymp Sig. (2-tailed). If Asymp Sig. (2-tailed) > 0.05, the distribution of the data is normal. If Asymp Sig. (2-tailed) < 0.05, then the distribution of the data is not normal.

**Tabel 1. Normality Test**

		Likuiditas	Struktur Aktiva	Ukuran Perusahaan	ROA	Struktur Modal
N		19	19	19	19	19
Normal Parameters <sup>a,b</sup>	Mean	.7248	.2929	187.132	-.0012	.4218
	Std. Deviation	217.492	.17201	458.224	.05601	.36899
Most Extreme Differences	Absolute	.317	.101	.197	.190	.249
	Positive	.177	.101	.197	.142	.249
	Negative	-.317	-.069	-.126	-.190	-.127
Test Statistic		.317	.101	.197	.190	.249
Asymp. Sig. (2-tailed)		.187 <sup>c</sup>	.200 <sup>c,d</sup>	.051 <sup>c</sup>	.069 <sup>c</sup>	.307 <sup>c</sup>

Source: Secondary Data from IDX processed with SPSS Ver. 23, 2020.

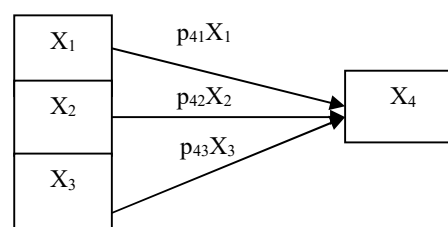
The normality test, it appears that the Asymp Sig. (2-tailed) values for all research design

groups are greater than the probability value (p) of 0.05. Therefore, it can be concluded that the

sample data in this study comes from a normally distributed population. The linearity test of the regression model is conducted by calculating the F value using SPSS 23.0 software. However, prior to that, the ordinal data from the questionnaire responses is converted to an interval scale using the Method of Successive Intervals (MSI). Once the calculated F value (Fhitung) is obtained, the results are interpreted using the following criteria:

Structural Equation 1:  $X_4 = p_{41}X_1 + p_{42}X_2 + p_{43}X_3 + e_1$

If  $F_{hitung} > F_{table}$ , reject  $H_0$  and accept  $H_a$ .  
 $H_0$ : The regression model between Liquidity ( $X_1$ ), Asset Structure ( $X_2$ ), and Company Size ( $X_3$ ) with ROA ( $X_4$ ) is not linear.  
 $H_a$ : The regression model is linear. The regression model for structural equation 1 can be seen in Picture 1 below:



**Picture. 1 Structural Regression Model 1**

Source: Processed Regression Model, 2020

To calculate  $F_{table}$ , a probability level ( $\alpha$ ) of 0.05 is used, while the calculation results of the F value for structural equation 1 using SPSS 23.0 can be seen in the ANOVA table below:

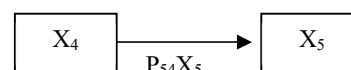
**Tabel 2 Results of the Linearity Test for Structural Equation One**

$$(X_4 = p_{41}X_1 + p_{42}X_2 + p_{43}X_3 + e_1)$$

		Sum of		Mean		
Model		Squares	Df	Square	F	Sig.
1	Regression	.006	3	.002	.556	.007 <sup>b</sup>
	Residual	.051	15	.003		
	Total	.056	18			

Source: Secondary Data from IDX processed with SPSS Ver. 23, 2020.

Based on the ANOVA table above, it is known that the significance value is  $0.007 < 0.05$  with a calculated F value of 0.556, thus we reject  $H_0$ . Therefore, the regression model for structural equation 1 is linear. Structural Equation 2:  $X_5 = p_{54}X_4 + e_2$  If  $F_{hitung} > F_{table}$ , reject  $H_0$  and accept  $H_a$ .  $H_0$ : The regression model between ROA ( $X_4$ ) and Employee Capital Structure ( $X_5$ ) is not linear.  $H_a$ : The regression model is linear. The regression model for structural equation 2 can be seen in Picture 2 below:



**Picture 2 Structural Regression Model 2**

Source: Processed Regression Model, 2020

The calculation results of the F value for structural equation 2 using SPSS 23.0 can be seen in the ANOVA table below:

**Tabel 3. Results of the Linearity Test for Structural Equation Two**

$$(X_5 = p_{54}X_4 + e_2)$$

		Sum of		Mean		
Model		Squares	Df	Square	F	Sig.



1 Regression	.122	1	.122	.889	.004 <sup>b</sup>
Residual	2.329	17	.137		
Total	2.451	18			

Source: Secondary Data from IDX processed with SPSS Ver. 23, 2020.

Based on the ANOVA table above, it is known that the significance value is  $0.004 < 0.05$  with a calculated F value of 0.889, thus we reject  $H_0$ . Therefore, the regression model for structural equation 2 is linear Path analysis utilizes the patterns of relationships to uncover the impact one variable or a set of variables exerts on other variables in addition to both direct and indirect effects. The path coefficients in this study are computed using SPSS version 23.

To determine the direct effects and indirect effects between the variables, the results of the calculation of the path coefficient are analyzed, while significance is determined using the t-test by comparing the table t value with the calculated t value. After determining the

calculated t value, the results are interpreted using the following criteria:

- If  $t_{\text{calculated}} > t_{\text{table}}$ ,  $H_0$  is rejected (there is a significant effect).
- If  $t_{\text{calculated}} < t_{\text{table}}$ , then  $H_0$  is accepted (no effect is significant).

To determine the  $t_{\text{table}}$  value, the conditions n-2 are used at 5% or 1% significance level ( $\alpha$ ). From  $t_{\text{table}}$  computation, t values obtained are therefore 1.662 ( $\alpha=0.05$ ;  $v_1=3$ ,  $v_2=89$ ) and 2.368 ( $\alpha=0.01$ ), while the calculations for the direct effect path coefficient are given below :

**Tabel 4. Results Of Path Analysis  
for Structural Equation 1**

		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	.021	.060		.353	.729
	Likuiditas	.009	.007	.331	1.265	.002
	Struktur Aktiva	.001	.082	.002	.009	.010
	Ukuran Perusahaan	-.002	.003	-.127	.485	.006

Source: Secondary Data from IDX processed with SPSS Ver. 23, 2020.

**Tabel 5. Results Of Path Analysis  
for Structural Equation 2**

		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	.175	.411	.426		.677
	Likuiditas	-.042	.048	-.245	.868	.004
	Struktur Aktiva	.049	.556	.023	.089	.009
	Ukuran Perusahaan	.014	.022	.176	.649	.005
	ROA	1.982	1.749	.301	1.134	.003

Source: Secondary Data from IDX processed with SPSS Ver. 23, 2020.

**Table 6. Recapitulation of Direct, Indirect, an Total Effects.**

VARIABLE EFFECTS	CAUSAL EFFECT		
	DIRECT	THROUGH ROA	Total dan Sig
Likuiditas terhadap ROA Struktur Aktiva Terhadap ROA Ukuran Perusahaan terhadap ROA	0,1265	-	0,1265 (0.002)*
Likuiditas terhadap Struktur Aktiva Terhadap ROA Struktur Modal Ukuran Perusahaan terhadap ROA Kerja terhadap Struktur Modal	0,009	-	0,009 (0.010)*
Likuiditas terhadap Struktur Modal Ukuran Perusahaan terhadap ROA Kerja terhadap Struktur Modal	0,485	-	0,485 (0.006)*
Likuiditas terhadap Struktur Modal Ukuran Perusahaan terhadap ROA Kerja terhadap Struktur Modal	-	(0,1265) (1,134) =0,143	0,143
Likuiditas terhadap Struktur Modal Ukuran Perusahaan terhadap ROA Kerja terhadap Struktur Modal	-	(0,009) (1,134) =0,0102	0,0102
Likuiditas terhadap Struktur Modal Ukuran Perusahaan terhadap ROA Kerja terhadap Struktur Modal	-	(0,4850) (1,134) =0,5499	0,5499
Likuiditas terhadap Struktur Modal Ukuran Perusahaan terhadap ROA Kerja terhadap Struktur Modal	1,134	-	1.134 (0.003)*
Likuiditas terhadap Struktur Modal Ukuran Perusahaan terhadap ROA Kerja terhadap Struktur Modal	0,868	-	0,868 (0,004)*
Likuiditas terhadap Struktur Modal Ukuran Perusahaan terhadap ROA Kerja terhadap Struktur Modal	0,089	-	0,089 (0.009)*
Likuiditas terhadap Struktur Modal Ukuran Perusahaan terhadap ROA Kerja terhadap Struktur Modal	0,649	-	0,649 (0.005)*

From Table 6, the path analysis outcome and direct effects between variables' significance can be explained as follows:

A. The path analysis outcome of Liquidity (X1) to ROA (X4) has a path coefficient 0.1265 and significance of  $0.002 < 0.05$ . Based on the analysis conducted, the path coefficient (which indicates the relationship between the variables in the model) is considered strong enough or relevant to be deemed significant.

B. The outcome of path analysis between Asset Structure (X2) and ROA (X4) is a path coefficient 0.009 with a significance of  $0.010 < 0.05$ . Based on the analysis conducted, the path coefficient (which indicates the relationship between the variables in the model) is considered strong enough or relevant to be deemed significant.

C. The outcome of path analysis between Company Size (X3) and ROA (X4) is a path coefficient 0.4850 with a significance of  $0.006 < 0.05$ . Based on the analysis conducted, the path coefficient (which indicates the relationship between the variables in the model) is considered strong enough or relevant to be deemed significant.

D. The path analysis result of ROA (X4) to Capital Structure (X5) is a path coefficient 1.134 and a significance of  $0.003 < 0.05$ . Therefore, the conclusion that can be drawn is path coefficient is declared significant.

E. The path analysis result of Liquidity (X1) to Capital Structure (X5) is a path coefficient 0.089 and a significance of  $0.004 < 0.05$ . Therefore, the conclusion that can be drawn is path coefficient is declared significant.

F. The result of path analysis between Asset Structure (X2) and Capital Structure (X5) is a path coefficient 0.091 with a significance of  $0.009 < 0.05$ . Therefore, the conclusion that can be drawn is path coefficient is declared significant.

G. The path analysis result for Company Size (X3) impacting Capital Structure (X5) has a path coefficient 0.649 and significance of  $0.005 < 0.05$ . Therefore, the conclusion is path coefficient is declared significant.

Based on the direct effects of each variable above, the indirect effects between exogenous variables and endogenous variables through intervening variables can be calculated as follows: The effect of Liquidity (X1) on Capital Structure (X5) through ROA (X4) The result is obtained from the multiplied regression coefficients of, between X1 with the regression coefficient of X4.  $(p41X1 \times p54X4) = (0.1265) (1.134) = 0.143$  Conclusion Criteria: If the indirect coefficient value  $>$  direct coefficient, then variable X4 is an intervening variable. If the indirect coefficient value  $<$  direct coefficient, then variable X4 is not an intervening variable. B. Conclusion: The value  $0.868 > 0.143$  means that the indirect coefficient value  $>$  direct coefficient, thus the effect of X1 on X5 through X4 is an intervening variable.

A. The effect of Asset Structure (X2) on Capital Structure (X5) through ROA (X4) The result is obtained from the multiplied regression coefficients of, between X2 with the regression coefficient of X4.  $(p42X2 \times p54X4) = (0.009) (1.134) = 0.0102$  Conclusion Criteria: If the indirect coefficient value  $>$  direct coefficient, then variable X4 is an intervening variable. If the indirect coefficient value  $<$  direct coefficient, then variable X4 is not an intervening variable. Conclusion: The value  $0.089 > 0.0102$  means that the indirect coefficient value  $>$  direct coefficient, thus the effect of X2 on X5 through X4 is an intervening variable.

B. The effect of Company Size (X3) on Capital Structure (X5) through ROA (X4) The result is obtained from the multiplied regression coefficients of, between X3 with the regression coefficient of X4.  $(p43X3 \times p54X4) = (0.4850) (1.134) = 0.5499$

Conclusion Criteria: If the indirect coefficient value  $>$  direct coefficient, then variable X4 is an intervening variable. If the indirect coefficient value  $<$  direct coefficient, then variable X4 is not an intervening variable. Conclusion: The value  $0.649 > 0.5499$  means that the indirect coefficient value  $>$  direct coefficient, thus the effect of X3 on X5 through X4 is an intervening variable.

Next, to determine the significance of the indirect effects, an error search for error 1 (e1) and error 2 (e2) is conducted with the help of the Adjusted R-Square value for Structural Equation 1 and Structural Equation 2. The results of the Adjusted R-Square calculation for Structural Equation 1 can be seen in the table :

**Table 7. Model Summary of Structural Equation 1**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.316 <sup>a</sup>	.100	.080	.05821

Source: Secondary Data from IDX processed with SPSS Ver. 23, 2020

Based on the Adjusted R-Square value in Table 7 above, the path coefficient with its residual (e1) is calculated as follows:

$$e1 = \sqrt{(1 - R^2)}$$

$$e1 = \sqrt{(1 - 0.080)}$$

$$e1 = 0.9591$$

Meanwhile, the Adjusted R-Square value for Structural Equation 2 is obtained in table 8:

	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.335 <sup>a</sup>	.112	.142	.39423

**Table 8. Model Summary of Structural Equation 2**



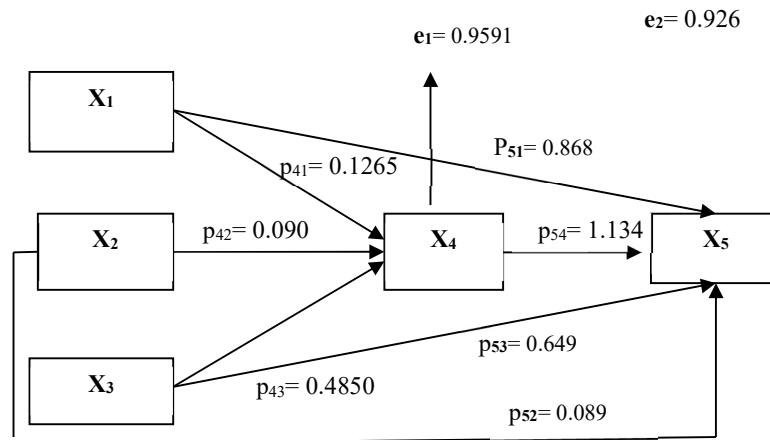
Based on the Adjusted R-Square value in Table 8 above, the path coefficient with its residual (e2) is calculated as follows:

$$e2 = \sqrt{(1 - R^2)}$$

$$e2 = \sqrt{(1 - 0.142)}$$

$$e2 = 0.926$$

Based on the results of the path coefficient calculations, the results can be illustrated as shown in the following model



**Picture 3 Path Analysis Model of Hypothesis Testing Results**

Source: Processed Regression Model, 2020

According to hypothesis testing and the results of data analysis, the following can be concluded:

1. The path from Liquidity (X1) to ROA (X4) is 0.1265 with significance  $0.002 < 0.05$ . Therefore, the conclusion that can be drawn is that the path coefficient is declared significant.

2. The path analysis result of Asset Structure (X2) to ROA (X4) is 0.009 with significance  $0.010 < 0.05$ . It can thus be concluded that the path coefficient is declared significant.

3. The path analysis result of X3 (Company Size) to X4 (ROA) has path coefficient 0.4850 and significance  $0.006 < 0.05$ . It can thus be concluded that the path coefficient is declared significant.

4. Path analysis result of X4 (ROA) on X5 (Capital Structure) is path coefficient 1.134 with significance  $0.003 < 0.05$ . It can therefore be argued that the path coefficient is declared significant.

5. Path analysis result of Liquidity (X1) on Capital Structure (X5) is path coefficient 0.089 and significance  $0.004 < 0.05$ . It can therefore be argued that the path coefficient is declared significant.

6. Outcome of Path analysis between Asset Structure (X2) and Capital Structure (X5) is path coefficient 0.091 and significance of  $0.009 < 0.05$ . Therefore, it can be said that the path coefficient is declared significant.

7. Path coefficient path analysis between Company Size (X3) influencing Capital Structure (X5) is 0.649 and significance value of  $0.005 < 0.05$ . The path coefficient is declared significant.

8. Liquidity (X1) effect on Capital Structure (X5) through ROA (X4) is estimated from X1 regression coefficient and X4's regression coefficient and their product.  $(p_{41}X1 * p_{54}X4) = (0.1265 * 1.134) = 0.143$ . Conclusion:  $0.868 > 0.143$  implies the Indirect Coefficient Value  $>$  Direct and therefore X1 effect on X5 through X4 is an Intervening variable.

9. The indirect effect of Asset Structure (X2) on Capital Structure (X5) by ROA (X4) is obtained by multiplying the coefficient of regression of X2 with the coefficient of regression of X4.  $(p42X2 \times p54X4) = (0.009)(1.134) = 0.0102$ . Conclusion: The value  $0.089 > 0.0102$  shows the Indirect Coefficient Value  $>$  Direct, hence the impact of X2 on X5 through X4 is an Intervening variable.

10. Indirect Company Size Effect on Capital Structure through ROA is obtained by multiplying regression coefficient of X3 with regression coefficient of X4.  $(p43X3 \times p54X4) = (0.4850)(1.134) = 0.5499$ . Conclusion: As value  $0.649 > 0.5499$ , then the Indirect Coefficient Value  $>$  Direct, therefore the X3 effect on X5 through X4 is an Intervening variable.

## 5. CONCLUSIONS AND DISCUSSION

According to the findings of the study, the capital structure of the business as well as financial performance as determined by Return on Assets (ROA) are significantly impacted by liquidity, asset structure, and company size. Businesses with strong liquidity typically have better financial performance, as evidenced by the significant path coefficient that liquidity exhibits towards ROA. Furthermore, ROA is positively impacted by both asset structure and company size, with the latter having the greatest impact. The relationship between these three variables and the capital structure is strengthened in this study by ROA, which acts as an intervening variable. As a result, businesses in the plantation subsector that were listed between 2016 and 2019 on the Indonesia Stock Exchange are encouraged to keep growing. It has been demonstrated to have a major impact on financial performance. Since the quality of the company's productive assets has been demonstrated to have a significant impact on its financial performance, management should improve the quality of their productive assets by exercising greater caution when allocating funds for financing. Before creating their capital structure policies, management should also take into account profitability factors, which are represented by return on assets (ROA) and company size. To

obtain a more thorough understanding, future studies could test this model across different industry sectors and investigate additional factors that might affect this relationship.

## 6. ACKNOWLEDGEMENT

Thank you to the journal reviewers who have kindly given me the opportunity to publish this research journal.

## 7. DAFTAR PUSTAKA

- Rikalmi, R. T., & Wibowo, S. S. A. . ((2014)). Pengaruh Ukuran Perusahaan dan Modal Kerja Terhadap Profitabilitas Perusahaan. . *Jurnal Ilmu dan Riset Manajemen*, 7 (10), 11-18.
- Abor, J. (2019). Company Size and its effect on the ability to obtain external financing. *internasional journal of financial research*, 10 (2) 19-30.
- Al-Najjar, B., & Taylor, A. (2019). Liquidity, asset structure, and company size: Evidence from the UK. *Research in International Business and Finance*, 49, 1-15.
- Ambawati, S., Sudana, I. M., & Kasmir. (2015). Corporate finance and capital structure in companies: A theoretical framework. *Journal of Finance*, 10 (2), 23-35.
- Apti, K. (2009). Peranan struktur aset terhadap profitabilitas bank. *Jurnal Ekonomi dan Bisnis*, 10(1), 1-13.
- Azhar, M. A., Younus, M. A., & Faisal, M. (2019). The relationship between profitability and capital structure in Indonesian companies. *Journal of Economics, Business, & Accountancy*, 21(2), 147-156.
- Brigham, E. F., & Houston, J. F. (2014). *Fundamentals of financial management*. Cengage Learning.

- Dalam, W. W. (2024). Maximizing Returns: Bagaimana Investor Dapat Memanfaatkan Informasi Tentang Kebijakan Dividen Dan Profitabilitas Perusahaan. *Journal Of Applied Managerial Accounting*.
- Dewi, D. N., & Mustanda, B. (2018). Asset structure and firm value: Evidence from Indonesian companies. *Academy of Accounting and Financial Studies Journal*, 22 (5), 1-15.
- Harto, R. (2008). *Business economics: Theory and application*. Jakarta: : Graha Ilmu.
- Hassaan, A., & Bashir, S. (2008). Analisis dampak struktur aset terhadap profitabilitas perusahaan. *Financial Analysis Journal*, 8(4), 155-162.
- Huang, C. J., & Song, F. M. (2009). *The determinants of capital structure*. Chinese: Evidence from Chinese listed companies.
- Huang, C. J., & Song, F. M. (2009). The determinants of capital structure: Evidence from Chinese listed companies. *China Journal of Accounting Research*, 2(1), 1-30.
- Kasmir. (2012). *Pengantar manajemen keuangan*. Jakarta: : PT RajaGrafindo Persada.
- Logianto, A. (2013). The significance of company size in financial performance. *Journal of Business Studies*, 21(4), 105-118.
- Manduh, M. H., & Hanif, M. (2012). Profitability in corporate management: A comprehensive approach. *International Journal of Economics and Finance*, 4(1), 18-28.
- Rumengan, E. (2010). *Statistical analysis and research methods in social sciences*. Yogyakarta: : Penerbit Universitas Gadjah Mada.
- Simanjuntak, S. (2006). *Manajemen keuangan dalam perbankan*. Jakarta: Penerbit Media.
- Sudana, I. M. (2011). *Manajemen keuangan: Teori dan aplikasi*. Jakarta: : Erlangga.
- Werdinagtias, A. (2002). Pengaruh likuiditas terhadap profitabilitas perusahaan perbankan yang terdaftar di Bursa Efek Indonesia. *Jurnal Perbankan*, 37(2), 317-324.