



## The Effect of Profitability, Liquidity on Capital Structure with Profit Growth as Moderating Variable

Dhiftania Luthfiya Azra<sup>1</sup>, Yenni Samri Juliati Nasution<sup>1</sup>, Nur Fadhilah Ahmad Hasibuan<sup>1</sup>

<sup>1</sup>Universitas Islam Negeri Sumatera Utara, Indonesia

\*Corresponding Author: Dhiftania Luthfiya Azra

Email: [dhiftaniazra@gmail.com](mailto:dhiftaniazra@gmail.com)



### Article Info

#### Article history:

Received 3 July 2024

Received in revised form 20

July 2024

Accepted 8 August 2024

#### Keywords:

Profitability

Liquidity

Capital Structure

Profit Growth

### Abstract

This study aims to determine the effect of profitability and liquidity on capital structure with profit growth as a moderation variable in PT Perkebunan Nusantara IV Medan for the 2018-2022 period. This study uses descriptive quantitative analysis, where data is obtained through secondary data in the published annual financial statements. This study used descriptive data analysis, normality test, multicollinearity test, autocorrelation test, heteroscedasticity test, two regression analysis tests, namely multiple linear regression analysis and moderation regression analysis, significance test t, significance test f, and determination coefficient test, using SPSS software version 25. The results of the study show that Profitability does not have a significant effect on Capital Structure with a significance value of  $0.078 > 0.05$ , Liquidity has a significant effect on Capital Structure with a significance value of  $0.015 < 0.05$ , Profit Growth is not able to moderate the effect of the Profitability variable on Capital Structure or can be said not to have a significant effect with a significance value of  $0.525 > 0.05$ , Profit Growth unable to moderate the effect of the Liquidity variable on Capital Structure or can be said to have no significant effect with a significance value of  $0.194 > 0.05$ . And the dependent variable of capital structure is jointly affected by the independent variables of profitability, liquidity, and the variable moderation of profit growth with significance values are  $0.026 < 0.05$ .

## Introduction

In running a company, making a profit is the primary goal of the company. Profit as a measure of financial performance reflects the occurrence of a process of capital increase or decrease from the share of transaction resources. Good profit growth, means that the company has a good financial condition that will ultimately increase the company's value. Companies with good profit growth will have large amounts of assets, thus giving them a greater opportunity to profit (Supeno, 2022). Profit is one of the elements that must be met in running a business with a type of profit oriented. The financial progress of a business is usually measured by the ability of a company's management to manage assets or capital for profit or profit. No profit-oriented company does not prioritize profit in its business.

Profit is the profit obtained from the difference between income and expenditure or burden (Azizi et al., 2023). Every company will compete to its primary goal of maximizing profits, therefore each company will race to keep improving its performance. It's customary for an investor to see whether a company is successful or not from the company's performance. The performance of a company can be assessed from the financial statements of each period, and the main focus of the financial report is the ability of an enterprise to generate profit or profitability (Zaen & Nur, 2024). Increased profits show that the company is well managed and operates efficiently. The capital structure is part of the financial structure that ins balance

between the total debt and the company's capital. The financial position of the company is determined by the low level of the corporate capital structure. In the financing of assets and increasing the business capital of a company, the use of the own capital structure is as a reference to the company in making decisions about the working capital to be used by the company, where the capital itself is financed by an external party or debt and capital funded by an internal party of the company. (Novwedayaningayu & Hirawati, 2020). The corporate capital structure is a reflection of the financial condition of the company itself, therefore the structure of capital is vital to the company's survival. So the manager must be able to maximize the value of the company or can minimize the cost of capital incurred by the company both in terms of the expected rate of return the company and the risks it will face (Hutauruk, 2020).

The sources of funds that are often used in companies are funds from outside the company, i.e. debts or loans. This is what causes the high level of debt of the company. If the value of the capital structure is above one or more of one, which means that the company has an amount of debt that exceeds the amount of its own capital, then the risk of the company on the financial liquidity side will be higher. (Umdiana & Claudia, 2020). If there is still a deficit in the funding of a company derived from its own capital, then it is necessary to consider the financing of the company from outside, i.e. debt. (debt financing). But in meeting the funding needs, companies must look for efficient funding alternatives. Efficient financing will happen when the company has an optimal capital structure (Nugraha et al., 2021). The debt-to-equity ratio (DER) is the primary financial ratio used to measure the financial position of a company. The Debt-to-Equity Ratio is the ratio that is used for measuring debt-to-equity. This ratio is calculated by comparison (Mangantar et al., 2020). Foreign capital or debt is capital originating outside the company which is temporary to the company. Equity or equity is capital originating from the owner of the company and invested in the company for an indefinite period of time. The equity may consist of the company's owners' deposits and the remaining profits retained (Cenora, 2023). DER is formulated as follows:

$$\text{Debt to Equity Ratio} = \frac{\text{Total debt}}{\text{Total equity}}$$

There are several aspects that affect the capital structure in this study, namely the ratio of profitability, liquidity, and profit growth. Where in the study of profit growth as a moderation variable between independent and dependent variables. According to Nurwani (2020) profitability is a ratio for evaluating the ability of a company to seek profit or profit in a given period. High profitability can improve the corporate capital structure by showing the company's ability to generate large profits, which can increase the creditor's confidence in the company (Princess & Associate, 2023). Profitability is also a ratio that indicates the ability of the company to profit from the use of its modalities. Companies that have large retained profits will use it as a funding so that, with a high retained profit, it will improve the corporate capital structure, as well as reduce the financing of external funds (Efendi & Ts, 2021). In this study, the profitability ratio used is the Return on Assets (ROA). This ratio is used to measure the ability of a company to perform in generating profit (Zulfi & Widyawati, 2021). The ROA is formulated as follows:

$$\text{Return on Assets} = \frac{\text{Net income after taxes}}{\text{Total Assets}} \times 100\%$$

According to Guidelines (2023) liquidity is a measurement through the ability to meet short-term obligations when they are due. The ability of a company to fulfil such obligations is an indication that they have stability and sustainability in life well. This condition is able to be

exploited by the management of the company in giving signals to the market about how the condition of a company. Companies with large liquidity are considered by investors to have small risks because they are able to meet their short-term obligations (Sipahutar et al., 2023). According to Muhammad et al. (2023) Current Ratio or so-called liquidity ratio is the ability of a company to meet its short-term obligations. Liquidity is not only related to the overall financial condition of the company, but also to its ability to convert certain liquid assets into cash. A too high current ratio means that the company holds too much of its assets properly. By contrast, a too low or even less than 1 actual ratio reflects the company's risk of not being able to meet due liabilities (Sofiani & Siregar, 2022). Current ratio is formulated as follows:

$$\text{Current Ratio} = \frac{\text{Smooth Assets}}{\text{Smooth Debt}}$$

According to Juda (2023) profit growth is one of the indicators to measure the success of a company's performance. Profit growth is said to be a measure for determining the increase in company revenue, profit growth also is a variable that describes the prospects of company growth in the future. According to Pratama (2023) profit growth is an adjustment to the annual financial statements. Growth of profits has benefits and aims for a company. Growing profits can be used as a guideline for decision-making by the company in planning dividend distribution to shareholders. Profit is used as an indicator to assess the company's operational performance. The profit reflects the success or failure of the company in achieving the established operational objectives. The success or failure of a company is generally characterized by the ability of management to see prospects and opportunities in the future, both in the long term and in the short term in terms of its growth (Amin et al., 2022). Profit growth is formulated using:

$$\Delta Y = \frac{Y_{it} - Y_{it-1}}{Y_{it-1}}$$

Description:

$\Delta Y$  = Growth Profit

$Y_{it-1}$  = The company's profits at a certain period

$Y_{it-1}$  = The company's profits in the previous period

Table 1. ROA, CR, DER, dan  $\Delta Y$  PT Nusantara Farm IV Field In %

Years	DER	ROA	CR	$\Delta Y$
2018	120.09	2.84	95.51	-3
2019	152.44	0.65	78.35	-76
2020	157.73	2.99	75.37	371
2021	113.93	9.99	164.03	282
2022	95.08	9.46	179.81	2.3

Source: PTPN IV Field Annual Financial Report, data processed (2024)

Seeing from the table above DER from 2018 - 2019 has a value of 120,09% higher than ROA 2,84%, CR 95,51% and Profit Growth of -3%. In 2020 DER has value of 152,445 higher compared to ROA 0,65% and CR 95,51%, and lower than Profit growth of 371%. In 2021 DER has an value of 113,93% higher than the ROA 9,99% and less than the CR 164,03% and the RBI 282%. In 2022 DER has a valuation of 95,08% higher than its ROA 9.46% and RBI 2.3%, and is lower than its CR of 179,81%. According to Ross et al. (2020) DER higher than my

ROA indicates that a company may have difficulty generating adequate profits from its assets even though it uses large amounts of debt to finance its operations, this identifies operational efficiency problems or asset management problems. A higher DER of Profit Growth suggests that companies face the challenge of increasing profits along with faster debt growth of equity, this identifies higher financial risks or problems in operational efficiency. From PTPN financial report data IV field period 2018 - 2022 it can be concluded that there are some economic challenges with the size of DER compared to ROA, CR and Labanya Growth. The higher DER indicates the company relies more on debt to finance its operations than its own capital (ekuitas). It can be risky if a company has difficulty paying interest or debt, which can lead to financial instability, difficulties in obtaining additional funding, or even a decline in investor confidence. Research on factors affecting capital structure has been done a lot before. Research conducted by Rosyid & Harsasalam (2022) analysed that profitability has a significant positive impact on capital structure, whereas according to Rahmawati & Sapari (2021) profitability does not have a significant impact on the capital structure. According to Aslah (2020) liquidity had a significant influence on the structure of capital. From some of the differences in the research, this study analyses the influence of liquidity, profitability on the capital structure. Profit growth as a moderation variable and increasing variable in this study because in the literature the researchers have not found any prior investigation on the specific discussion mentioned.

### **Financial Performance**

Financial performance refers to the evaluation of the financial performance of an entity, such as a company, organization, or individual, over a certain period of time. It covers various aspects that measure the ability and efficiency of the entity in managing and using its financial resources to a set goal. Financial performance provides an overview of a entity's financial strengths and weaknesses, as well as provides important information to stakeholders for future decision-making, evaluation, and planning. Some key indicators of financial performance include: 1) Rentability: The ability of the entity to generate profits from its operational activities, such as gross profit margin, net profit margin and return on investment (ROI); 2) Liquidity: the ability of an entity for fulfilling short-term financial obligations such as smooth ratio and cash ratio to the debt of a launcher; 3) Leverage: the level of a entity's debt compared to its equity, reflecting the levels of financial risk; 4) Operational efficiency: The entity ' s ability to manage assets and liabilities efficiently, like asset turnover and stock turnover; 5) Growth: The rate of growth of revenue or profit from period to period, which reflects the capacity of the Entity to grow and expand its operations. 6) Financial Sustainability: The capacity to maintain long term financial balance, including risk management and investment strategies (Ross et al., 2020).

### **Profitability**

Profitability is one of the measures of a company's performance, the profitability of an enterprise indicates the ability of a enterprise to generate profits over a certain period. The profitability of a company can be measured through several ways depending on the profits and assets or capital that will be compared one to the other (Nugraha & Riharjo, 2022). Companies with a high profitability rate can meet operational and investment needs through internal funding, so with a higher profitability increase it will have an impact on the lower capital structure, because the company will use more funding that comes from internal funds i.e. profit retention (Angie, 2023). According to Ross et al. (2020) some commonly used profitability ratios: 1) Gross Profit Margin: Measures the profitability of the company after deducting the direct cost of production. The formula is  $(\text{Gross profit}/\text{sales}) \times 100\%$ ; 2) Net profit margin: Displays the percentage of net profit from the company's total revenue after deduction of all

costs, including operating costs and taxes. It measures the rate of return on investment for shareholders of company profits. It is  $(\text{Net Profit}/\text{Equity}) \times 100\%$ ; 3) Return on Assets (ROA): Measured the ability of a company to generate profits from the total assets it owns. 6. Operating Profit Margin: Measures the profitability of a company from its core business operations, excluding non-operational income or costs. The formula is  $(\text{Operating Profits}/\text{Sales}) \times 100\%$ .

## **Liquidity**

Liquidity is a company's ability to meet short-term obligations that must be paid immediately. (Saragih et al., 2023). Liquidity is used to measure the ability of a company to meet its obligations - its financial obligations to be fulfilled immediately or short-term obligations. Such ability is the ability of the company to continue its operations when the company is obliged to pay its obligations which will reduce its operational funds (Cenora, 2023). The small size of the company's running assets is a reflection of its liquidity. The liquidity ratio reflects the company's ability to pay off its short-term liabilities or how quickly the company can convert its assets into cash. According to Ross et al. (2020) some commonly used liquidity ratios: (1) Current Ratio: This ratio measures a company's ability to pay short-term liabilities using smooth assets. The formula is  $\text{Current Assets} / \text{Current Liabilities}$ . A high current ratio indicates good liquidity; (2) Quick Ratio (Acid-Test Ratio): This ratio is similar to the current ratio, but stricter because it does not include inventory in its calculation. The formula is  $(\text{Current Assets} - \text{Inventories}) / \text{Current Liabilities}$ . Quick ratio gives a more conservative picture of the liquidity of the company; (3) Cash Ratio: This ratio shows the company's ability to pay short-term liabilities using only cash and cash equivalents. The formula is  $(\text{Cash and Cash Equivalents}) / \text{Current Liabilities}$ . Cash ratio gives the strictest picture of liquidity as it only considers the most liquid assets; (4) Operating Cash Flow Ratio: This ratio measures a company's ability to pay short-term liabilities using its operating cash flows. The formula is  $\text{Operating cash Flow} / \text{Current Liabilities}$ . This ratios show how well the operational cash flow can cover short-term liability.

## **Capital Structure**

Capital structure is the financial proportion of the industry, i.e. between the capital it holds, which comes from long-term liabilities, and the equity of the shareholders, which is the source of the financing of an industry. Other sources also say that the capital structure is a comparison between the total debt (foreign capital) and the total own capital/equity. It can be concluded that the structure of capital is part of the financial structure that derives from the comparison of short-term debt, long-term Debt, preferential shares as well as ordinary shares used by the industry. The use of the own capital structure is as a reference to the company in making decisions about the working capital to be used by the company, where the capital itself is financed by an external party or debt and capital funded by an internal party of the company (Supeno, 2022). According to Ross et al. (2020) some commonly used capital structure ratios: 1) Debt-to-Equity Ratio (DER): This ratio measures the ratio of a company's debt to its equity. The formula is  $\text{Total Liability} / \text{Total Equitas}$ .

DER helps indicate how much a company uses debt for financing its operations compared to its own capital; 2) Debt Ratio: This ratio measures the proportion of company assets funded by debt. The formula is  $\text{Total Liability} / \text{Total Assets}$ . The higher the debt ratio, the greater the ratio of assets financed by debts; 3) Equity ratio: The ratio is the opposite of debt ratios, measuring the proportions of corporate assets financed by equity. It is  $\text{Total Equity} / \text{Total Asset}$ . The higher the equity ratio, the larger the percentage of the assets financed by equities; 4) Debt-to-Capital ratios: This ratios measure the share of total debt to total capital (debt+equity). The form is  $\text{Total Debt} / (\text{Total Debt} + \text{Total Equity})$ . These ratios give an idea of how much debt is

used in the corporate capital structure; 5) Interest Coverage Ratio: This ratio shows the ability of the company to pay interest on its debt using its operating profit. The formula is Earnings Before Interest and Taxes (EBIT) / Interest Expenses. The higher the interest coverage ratio, the better the company's ability to meet its obligations; 6) Debt Service Coverage Ratio (DSCR): This ratio is often used in credit analysis to measure the ability of a company to pay its debt (including interest and debt) from its operational cash flows. The formula is EBITDA/Total Debt Services (flower + debt).

### Growth Profit

Operational profit is the difference between the realised income arising from a transaction over a period and the cost associated with such income (Dianitha, et al, 2020). According to Juliana (2020) profit growth is the percentage of profit increase that a company can generate in the form of net profit. Profit growth is said to be a measure to determine the increase in company revenue and is an indicator to measure the success of a company's performance. If the company's revenue increases every year, there is no decrease and is considered in good condition. Therefore, the information is useful for users of the company's financial statements as decision-makers at the time of making an investment (Ahmad, 2023). Profit growth is calculated by deducting the profit of the current period from the profit from the previous period and then divided by the profit in the earlier period. Profit growth is the difference between this year's profit and last year's net profit divided by last year's net profit, calculated by subtracting the current period's profit from the previous period's profit and then dividing by the previous period's profit (Susyana & Nugraha, 2020).

### Methods

#### Research Design

This study adopts a quantitative research approach to systematically explore the relationships between key financial variables: as well as profitability, liquidity and capital structure where profit growth is seen to moderate these. A quantitative research style is thus characterized by the integration of large numbers and their subsequent analysis, preferably by computer. It is applied to measure variables, on conduct hypothesis and also to set relationship or association between two or more financial ratios. Quantitative research methodology is used in this study to analyse the impacts of profitability as total return on assets, financial solvency through current ratio and profit growth on the capital structure Proportion, expressed by debt-equity ratio of a firm. That way, the strength of these relations and the statistical confidence can be quantified with a high degree of accuracy.

#### Gathering of data and measurement of variables

This research based on secondary source of data which is the annual financial data of PT Perkebunan Nusantara IV Medan for the year 2018-2022. The data were obtained from the Indonesia Stock Exchange (www. idx. co. id) The financial reports give relevant information on the state of the company's financial health; information such as assets, liabilities and equities, revenues and expenses among others. These were useful in estimating some of the relevant variables that were to be used in the study.

Tabel 2. Instrument Development Table

Variable	Definition	Measurement	Formula	Purpose
Profitability (ROA)	Efficiency of asset use to generate profit	Net Income After Taxes / Total Assets	$ROA = \frac{\text{Net Income After Taxes}}{\text{Total Assets}} \times 100\%$	Measures how effectively the company

				uses its assets to generate profit.
Liquidity (CR)	Ability to meet short-term obligations	Current Assets / Current Liabilities	$\text{Current Ratio (CR)} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$	Assesses the company's ability to cover short-term debts.
Capital Structure (DER)	Proportion of debt versus equity financing	Total Debt / Total Equity	$\text{Debt-to-Equity Ratio (DER)} = \frac{\text{Total Debt}}{\text{Total Equity}}$	Indicates the company's financial leverage and risk.
Profit Growth	Change in net profit over time	Percentage change in net profit from one year to the next	$\text{Profit Growth} = \frac{Y_{it} - Y_{it-1}}{Y_{it-1}} \times 100\%$	Measures the company's financial performance and growth over time.

## Data Analysis

The data analysis in this particular study is intended to examine interactive effects of profitability, liquidity and capital structure with profit growth as the moderator variable. The analytic process will be designed in such a way that it performs existential statistical analyses, meets the research questions and has a sound interpretation of the outcomes.

### *Preliminary Data Examination*

As a preanalysis step, the data for all the independent and dependent variables was analyzed for validity and reliability. The following steps were taken: With respect to cleaning of the raw data the following was done: Incompleteness was addressed by either using simple mean values for minor missing records, or by totally excluding records with many missing values. Research Design

This study adopts a quantitative research approach to systematically explore the relationships between key financial variables: on profitability, liquidity and capital structure with a special reference to the extent to which profit growth moderates these relationships. A quantitative research means research in which data is collected in a large quantity and analyzed statistically. It is employed to measure variables, analyze theories and determine the pattern of one or many financial parameters. This study thus uses a quantitative research approach to analyse the relationship between profitability (Return on Assets), liquidity (Current Ratio, and profit growth on capital structure (Debt-to-Equity Ratio). This approach makes it possible to quantify these relationships and decide on the likelihood of obtaining such results by chance.

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \dots + e.$$

Magfiroh (2020) is a regression analysis that acts as a variable that can strengthen or weaken the relationship between predictor variable (independent) and dependent variable, with the formula:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_2 X_1 * Z + \beta_2 X_2 * Z + \dots + e$$

### *Model Validation and Goodness-of-Fit*

Coefficient of Multiple Determination [R-Squared (R<sup>2</sup>) and Adjusted R-Squared), these were applied to determine the extent of variance in the dependent variable, namely Capital Structure



that was due to the variation in the independent variables. Adjusted R<sup>2</sup> can be considered to be ideal for comparing the models with the varying number of predictors because it factors in the number of variables included in the model to the computing of the value. In addition to this, the F-test was used to determine the significance of the regression models under analysis. High F-statistic reveal that there is a significant relationship between the dependent variable and the independent variable combined. In addition to ordinary residual analysis, residual plots were performed to detect trends of curve linearity, variation constant and the presence or absence of outliers. This step enables the check of reliability of the regression results.

## Results and Discussion

### Descriptive Statistics

Descriptive testing is a statistical method used to summarize and describe data in an informative manner. By using descriptive tests to calculate mean, median, and mode, we can understand the mean or most representative values of a data set. It helps in giving a clear picture of how the data is distributed (Hair et al., 2019).

Table 3. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std
Profitability	5	.95	1.58	1.2785	.26577
Liquidity	5	.01	.10	.0519	.04250
Capital Structure	5	.75	1.80	1.1861	.49580
Growth Profit	5	-.76	3.72	1.1512	1.98346

Source: SPSS Output, Secondary Data Processed (2024)

Based on the statistical descriptive test results above, it can be described as follows: a) Rentability has a minimum value of 0.95%, a maximum value of 1.58%, a standard deviation of 0.26%, and an average-value of 1.27%; b) Liquidity is a minimum of 0.01%; a maximum of 0.10%; a standard-deviction of 0.42%; and a mean-values of 0.05%; c) Capital Structure has a minimal of 0.75%, the maximum of 1.80%, the standard deviations of 0.49%, and the equity of 1.18%. By using descriptive tests to calculate mean, median, and mode, we can understand the mean or most representative values of a data set. It helps in giving a clear picture of how the data is distributed. Variability is important information because it gives insight into how uniform or variable the data is. It helps in evaluating the homogeneity of the data or the potential diversity in it. Descriptive testing helps in providing a compact and informative summary of the main characteristics of a statistical data set.

### Normality Test

The normality test is performed to prove whether the data in this study is normal or not. On the assumption that if the data is greater than 0.05 ( $> 0.05$ ), then it is said to be normal, whereas if it is less than 0.05, it is stated to be non-normal (Hair et al., 2019).

Table 4. Normality Test Results

		Unstandardized Residual
N		5
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	.01383487
Most Extreme Differences	Absolute	.215
	Positive	.215
	Negative	-.202



Test Statistic	.215
Asymp. Sig. (2-tailed)	.200 <sup>c,d</sup>

Source: SPSS Output, Secondary Data Processed (2024)

Based on the above normality test results obtained test results of 0,200 or greater than 0,05 ( $>0,05$ ), then it can be said that the data is distributed normally. With normal distributed data indicating that the statistical test results used (such as t test, ANOVA, or regression) are reliable, the data can be processed and used in predictions and simulations that can be subsequently concluded. Data not distributed normal can result in inaccurate estimates or errors in the interpretation of the statistics results. Therefore, the normality test helps in ensuring the reliability of the results of the statistical analysis performed.

### Multicollinearity test

A multicollinearity test is performed to see if a regression model identifies a correlation between variables. If the Tolerance value is greater than 0.05 ( $> 0.05$ ), then there is no multikoelity, whereas if the tolerance value is less than 0.05, then it is multicoelity. (Hair et al., 2019).

Table 5. Multicollinearity test results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics		
	B	Std. Error	Beta			Tolerance	VIF	
1	(Constant)	.379	.239		1.583	.359		
	ProfitabilitY	.172	.158	.092	1.086	.474	.108	9.240
	Liquidity	13.121	.995	1.125	13.185	.048	.107	9.345
	Growth Profit	-.081	.013	-.324	-6.261	.101	.292	3.430

Source: SPSS Output, Secondary Data Processed (2024)

Based on the results of the multicollinearity test, the tolerance value is more than 0.05 ( $> 0.05$ ) and the VIF value is less than 10 ( $< 10$ ), so it can be said that there is no multicollinearity. Data that does not experience multicollinearity is data in which independent variables in the regression model do not correlate significantly. This means that there is no strong linear relationship between two or more independent variables in the model so that data in precise conditions can be reliable for further processing. Properly measured variables ensure that the variables used in the analysis have clear definitions and are measured in an accurate way can help reduce the likelihood of unwanted correlations. The autocorrelation test is performed to see if the regression model identifies the existence of auto-correlation between variables. By the assumption that if the data is greater than 0.05 ( $> 0.05$ ), then it is said that there is no autocorrelation, whereas if it is less than 0.05, then there is auto-correlation. (Hair et al., 2019).

Table 6. Autocorrelation Test Results

	Unstandardized Residual
Test Value <sup>a</sup>	-.00406
Cases < Test Value	2
Cases $\geq$ Test Value	3
Total Cases	5
Number of Runs	4
Z	.109

Asymp. Sig. (2-tailed)	.913
------------------------	------

Source: SPSS Output, Secondary Data Processed (2024)

Based on the results of the autocorrelation test above, a test result of 0.913 or greater than 0.05 ( $> 0.05$ ) is obtained so that it can be said that there is no autocorrelation. Autocorrelation occurs when there is a pattern or structure in the residual (predictive error) of the model, which indicates that nearby values in the time series tend to correlate. Autocorrelation can be a serious problem in time row analysis as it can result in biased or inconsistent estimates of parameters, as well as confusing confidence intervals.

### Test Heteroskedasticities

A heteroskedasticity test is performed to test whether in a regression model there is an inequality of variance from the residual of one observation to the other. On the assumption that if the data is greater than 0.05 ( $> 0.05$ ), it is said that there is no heterocadasthesis, whereas if it is less than 0.05, it is stated that there has been heterocadaesthesia. (Hair et al., 2019).

Table 7. Result Test Heteroskedasticities

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.008	.018		.437	.738
	Profitability	-.002	.012	-.107	-.189	.881
	Liquidity	.101	.075	.767	1.354	.405
	Profit Growth	.001	.001	.336	.978	.507

a. Dependent Variable: ABS\_RES

Source: SPSS Output, Secondary Data Processed (2024)

Based on the results of the above-mentioned heteroskedasticity test, significant data of more than 0.05 ( $> 0.05$ ) are obtained so that it can be said that there is no heteroskedastic. Data that does not experience heteroscedastic has important uses in statistical and econometric analysis, especially in the context of regression models. Data free of heteroscedastic is important to ensure the reliability and validity of the statistical analysis carried out, in the framework of the regression model. This allows for a more accurate interpretation of the analysis results, as well as the making of better decisions based on statistical findings.

### T Significance Test

Partial hypothesis testing, the t test is used to see whether an independent variable is influenced by an individual variable depending on the status of acceptance or rejection of the hypotheses proposed can be determined from the test results. With the assumption that when the significance value is less than 0.05 ( $< 0.05$ ), it is said to be influential, and when the significant value is greater than 0.05, it is stated to be uninfluential. (Hair et al., 2019).

### In Double Linear Regression

Table 8. T Significance Test Variable Profitability, Liquidity, modal structural

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.603	.620		2.585	.123
	Profitability	-.649	.398	-.348	-3.374	.078

	Liquidity	7.948	2.488	.681	8.203	.015
a. Dependent Variable: Structure Modal						

Source: SPSS Output, Secondary Data Processed (2024)

Based on the results of the double linear regression test above, the following data is obtained: a) Variable Profitability to Capital Structure obtained a significance value of 0.078 greater than 0.05 ( $>0.05$ ) so concluded that profitability does not have a significant impact on capital Structure. With a counted t value of -3,374; b) Liquidity variable against Capital Structure obtained t count of 8,203 and significance value of 0,015 less than 0,05 ( $<0,05$ ) .015 concluded liquidity has no significant influence on Capital Structures.

### Effects of Profitability on Capital Structure

The results of the test of the hypothesis in table 4.6 showed that profitability had no significant influence on the Capital Structure. With a count t value of -3,374 and a significance value of 0,078  $> 0.05$ . This study is in line with the study (Rahmawati, 2021) which states that profitability does not have a significant impact on capital structures with a significance value of 0.555  $> 0.05$ . The study (Fathoni & Syarifudin, 2021) states that the profitability has no significant effect on capital structure with a significant value of 0.277  $> 0.05$ . The theory that supports the results of this research (Ross, S.A et al., 2020) is the Trade-off Theory: This theory suggests that companies seek to find a balance between the cost of interest payable on debt with the tax benefit of debt.

Financial Hierarchy states that companies tend to choose sources of financing in a preferential sequence based on costs and controls. It can be concluded from the results of this initiative according to the trade-off theory suggests that the profitability of a company is believed to have no direct influence in capital structure decisions since the main focus is on financial costs and tax benefits. Managers and investors often have limited access to relevant information about actual profitability, so capital structure decisions are more likely to be influenced by other more measurable factors such as company size, operational risk, and dividend policies rather than direct profitability. The results of this study show that high profitability can reduce the need for companies to borrow, because it can finance investments through the profits generated. Therefore, the capital structure may not be much influenced by direct profitability. The company also does not consider the small amount of profit generated in determining its modal structure, this is because the company has established the modal structure based on the return and capital costs arising from the use of debt to support the company's operational activities.

### Liquidity Effects on Capital Structure

This study is in line with the study (Mukaromah & Suwarti, 2022) which states that liquidity affects the capital structure with a significance value of 0,015  $< 0,05$ . The study (Jonnardi, 2021) stated that liquidities affect capital structures with a significant value of 0,000  $< 0,05$  and the research (Nursyahbani, 2023) states that the liquidity influences the capital construction with a signifying value of 0.006  $< 0.05$ . The theory that supports the results of this research according to Ross et al. (2020) is the Trade-off Theory: This theory notes that companies seek to balance the benefits of using debt (such as interest tax cuts) with related costs (seperti risiko kebangkrutan dan biaya keuangan). Financial Hierarchy Theory: This theory suggests that companies tend to choose sources of funds in order of priority based on cost and control. And Pecking Order Theory: Companies tend to use internal funds first (own money), then debt, and finally equity shares.

It can be concluded that the results of this study according to the Low Liquidity Trade-off Theory may be more likely to avoid using additional debt, because they may have difficulty meeting the obligation to pay interest or debt at the specified time. According to the Financial Hierarchy Theory, liquidity can be a determining factor in this financial sequence because firms tend to use internal funds (such as cash and internal equity) before switching to external debt. According to Pecking Order theory, companies tend to first use internal liquidity (like internal cash) before looking for sources of external funds, such as debt, which can affect their capital structure. Thus, the results of the research show that the higher the company's ability to pay its short-term debt, the more it can be seen that the company is in a healthy condition. Liquidity can be regarded as a significant factor in determining the capital structure of a company, as it affects the company's decisions in using debt and other external fund sources. Companies with good liquidity tend to be more flexible in managing their capital structure, while companies with low liquidity may prefer to rely on internal funds or equity capital rather than additional debt.

### ***Moderated Regression Analysis***

Table 9. T Significance Test Variable Profitability, Liquidity, modal structural

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.445	.676		5.094	.036
	Profitability	-1.813	.537	-.972	-3.374	.078
	Profitability – Profit Growth	.038	.049	.220	.764	.525
a. Dependent Variable: Capital Structure						

Source: SPSS Output, Secondary Data Processed (2024)

Based on the above T test obtained a significance value of 0.525 greater than 0.05 ( $> 0.05$ ) with a count t value of 0.764. So it can be concluded that profit growth does not moderate the influence on capital structures.

### **The Effect of Profitability on Capital Structure with Profit Growth as a Moderation Variable**

The results of the test of the hypothesis in table 7 show that profit growth has no ability to moderate profitability against capital structure or is said to have no influence. With a t count of 0.764 and a significance of  $0.525 > 0.05$ . In well-known literature, researchers have not found that there is a previous penalty that specifically deals with profit growth as a variable that moderates profitability against capital structures. The theory that supports the results of this research is the Trade-off Theory: This theory emphasizes that decisions on the corporate capital structure are influenced by a trade-off between the cost of debt (such as interest) and the tax benefits derived from debt. The Pecking Order theory: It states that companies tend to choose a sequence of sources of funding based on costs and controls. And the Financial Hierarchy Theories: It suggests that firms tend to select sources of money in a preferential sequence based on cost and control. It can be concluded that this study according to the Trade-off Theory of Profit Growth does not directly moderate the decision to use debt because high profitability tends to strengthen a company's ability to acquire debt at a lower cost, but the decision for using debt is usually based on consideration of the comparison of debt costs with tax benefits from debt, not from profit growth.

According to the Pecking Order Theory although profit growth can affect the ability of a company to obtain external financing, such as debts, the sequence of pecking orders is more based on preference to use internal funds (such as internal cash) before seeking external funds. According to the Financial Hierarchy Theory, higher profitability can help companies to obtain debt at a lower cost, but capital structure decisions are more influenced by factors such as debt cost and risk of bankruptcy, not by profit growth. Thus, the results show that profit growth cannot moderate the influence of profitability on capital structures based on the main focus of financial theory that highlights the trade-off of debt costs, the pecking order in the selection of fund sources. Profit growth may give a positive signal to creditors and potential investors, but capital structure decisions tend to be more influenced by factors that are more related to financial costs and risks, such as profitability and liquidity of companies.

Table 10. T Significance Test Variable Profitability, Liquidity, modal structural

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.599	.085		7.067	.019
	Profitability	12.880	1.570	1.104	8.203	.015
	Profitability – Profit Growth	-1.036	.537	-.259	-1.928	.194
a. Dependent Variable: Capital Structure						

Based on the above T test, a significant value of 0.194 is obtained greater than 0.05 ( $> 0.05$ ) with a count t value of -1,928. So it can be concluded that profit growth does not moderate the influence of liquidity on the capital structure.

### The Effect of Liquidity on Capital Structure with Profit Growth as Moderation Variable

The results of the test of the hypothesis in table 4.8 indicate that profit growth has no ability to moderate liquidity against capital structure or is said to have no significant influence. With a t count of -1,928 and a significance of  $0.194 > 0.05$ . In the known literature, the researchers have not found that there is a previous penalty that specifically deals with profit growth as a variable that moderates liquidity to the capital structure. The theory that supports this study according to (Ross, S.A et al., 2020) is the Trade-off Theory: This theory emphasizes that capital structure decisions are influenced by the trade-off between the cost of debt and tax benefits derived from debt. And the theory of financial hierarchy: This theory states that companies have a sequence of preference in the selection of funds sources, ranging from internal (cash and profit held) to external (utang). It can be concluded the results of this study according to the Trade-off Theory of profit growth does not moderate the influence of liquidity on capital structure decisions. Companies with low liquidity may be inclined to avoid using additional debt, despite high profit growth.

According to the Pecking Order Theory, adequate internal liquidity (cash) can be a preferred alternative to debt despite higher profits growth. Therefore, profit growth does not moderate the influence of liquidity on capital structure decisions. According to the Financial Hierarchy Theory, adequate liquidity can allow companies to use internal funds before seeking external funding. Profit growth, although it can strengthen a company's financial position, does not directly moderate the influence of liquidity on capital structures because liquidity is a more fundamental factor in financing decisions. Thus, the results show that profit growth does not moderate the influence of liquidity on capital structure. Decisions about capital structure are more influenced by factors such as debt cost trade-offs, pecking orders sequence, and corporate

liquidity levels, which tend to be more stable than profit growth fluctuations. Good liquidity can strengthen creditor and investor confidence in the company's ability to meet financial obligations. Although profit growth can give positive signals to the market, capital structure decisions are more affected by factors that are more related to liquidity and company fund flow tendencies.

### F Significance Test

The F statistical test is performed to show whether all the independent variables entered in the model have a combined influence on the dependent variable. With the provision that when the significance value is less than 0.05 ( $< 0.05$ ), it is said to be influential, and when the value of significance is greater than 0.05, it is stated that it is not. (Hair et al., 2019).

Table 11. F Significance Test Variable Profitability, Liquidity, modal structural

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.958	2	.479	38.211	.026 <sup>b</sup>
	Residual	.025	2	.013		
	<b>Total</b>	<b>.983</b>	<b>4</b>			
a. Dependent Variable: Modal structural						
b. Predictors: (Constant), Profitability, Liquidity, Profit Growth						

Source: SPSS Output, Secondary Data Processed (2024)

Simultaneous test results, test f showed that the significance level is 0.026, because the probability level is less than 0.05 ( $< 0.05$ ). It can be concluded that the capital structure dependent variables are influenced jointly by the independent variables of profitability, liquidity, and profit growth.

### Effects of Profitability, Liquidity, and Profit Growth on Capital Structure Together - Equally

From the results of the test of the hypothesis in table 4.9 it is obtained that the capital structure dependent variables are influenced jointly by the independent variables of profitability, liquidity, and profit growth. With a f count of 38,211 and a significance of  $0.026 < 0.05$ . In the literature known, the researchers have not found that there is a previous speculation specifically dealing with the impact of profitability, liquidity, and profit growth on equal capital structures. The theory that supports this study (Ross, S.A et al., 2020) is that the agency theory states that high rates of profitability can reduce agency costs because efficient managers can make better use of profits to meet the needs of shareholders.

The Trade-Off Theory suggests that companies tend to choose capital structures that reflect a trade-off between profit costs and financial costs. It can be concluded from the results of this research based on the theory showing that profitability, liquidity, and profit growth influence the capital structure together equally. More profitable companies may be more likely to use less debt because they have more internal funds for project financing. High liquidity can increase the financial flexibility of a company and reduce the risk of bankruptcy, thereby reducing the company's dependence on debt, while low liquidity may encourage the company to use debt as an additional source of financing.

A stable or high profit growth can increase creditor confidence in the company's ability to pay its debt, thus enabling the company to obtain debt at a lower cost, while an unstable or falling profit growth may increase default risk, which may make the company more cautious in taking

debt. Thus, the results show that profitability, liquidity, and profit growth play an important role in determining the capital structure of a company. More profitable companies tend to use less debt, while liquidity and profit growth can influence corporate financing decisions through their influence on risk and creditor confidence.

### Determination Coefficient Test (R2)

A determination coefficient test, or commonly known as R-squared (R2), is a statistical metric used to measure how well a linear regression model matches the observed data. With the provision R-squared values are always in the range of 0% to 1%. A value of 0% indicates that the independent variable does not explain any variation in the dependent variable, whereas a value of 1% indicates the independence variable explains the entire variation of the dependant variable. (Hair et al., 2019).

### In Double Linear Regression

Table 12. R Square Test Variable Profitability, Liquidity, Structure Modal

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.984 <sup>a</sup>	.969	.937	.1240591
a. Predictors: (Constant), Profitability, Liquidity				

Source: SPSS Output, Secondary Data Processed (2024)

Based on the above known R Square value of 0.969, or R Square profitability and liquidity to Capital Structure value of 96.9%, it can be understood that the variation of the dependent variable can be explained by the independent variable in the model. The higher value of the determination coefficient test (R-squared) indicates that the regression model well explains the variance of the depending variable using existing independent variables. In other words, the model used in this study is accurate and reliable.

### Moderated Regression Analysis

Table 13. R Squared Test Variable Profitability, Liquidity, Profit growth, Modal structure

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.923 <sup>a</sup>	.852	.704	.2696735
2	.987 <sup>a</sup>	.974	.949	.1119735
a. Predictors: (Constant), Variable Profitability, Liquidity, Profit growth, modal structure				

Source: SPSS Output, Secondary Data Processed (2024)

Based on the above known R Square values of 0.852 and 0.974, or R Square Profitability to Capital Structures after the moderation variable of 85.2%. And the S Square Liquidity to Capital Strukturess after the 97.4% moderation Variable of Capital Growth, it can be understood that the variation of the variable dependent on the independent variable can be explained by the moderating variable in the model. The high test value of the determination coefficient (R-squared) indicates that the regression model well explains the variability of the dependent variable to the independent Variable using the existing moderated variable. The higher the R-squared value, the better the model can be used to predict the value of a variable depending on



the Independent Variable based on the moderating variable used in that model. In other words, the model used in this study is accurate and reliable.

Based on the results of this study, several highly specific insights can be provided for the ongoing discussion in the academic literature on capital structure as well as for real-world decisions in financial management. Through the findings that show that while profitability does not affect capital structure, liquidity does, this research refutes and expands upon previous theoretical models in corporate finance when showing that profit growth does not operate as a key moderating variable either. The findings imply an anomaly with the existing capital structure theories, including Tradeoff Theory which envisages that firms consider the benefits of debt in terms of tax shields against the cost of potential financial risk.

It was in this regard that we would expect the level of profitability to increase leverage owing to enhanced ability to service on debt. However, the fact that profitability does not affect the capital structure of PT Perkebunan Nusantara IV Medan means that this balance may not be as obligatory as This is in congruence with the Pecking Order Theory that states a firm should finance their operations firstly by internal fund (liquidity), secondly by debt and last by equity. The first pre-eminence of liquidity over profitability in the capital structure choices, as seen in this study, reaffirms the practical relevance of internal financial flexibility. Target structures may be to eliminate or minimise the use of external finance through gearing due to problems associated with high levels of gearing especially during volatile and uncertain economic conditions.

Additionally, the study provides evidence of the fact that the moderating role of profit growth in the relationship between profitability or liquidity and capital structure contradicts the prevailing notion of growth firms that use leverage to fund expansion. This outcome may mean that firms with higher profit growth may not depend on debt financing, this could well be due to strategic preference for self-financing, which could be owing to the fact that many firms may wish to be financially independent in order not to compromise on control of the firm. From this perspective, this finding raises doubt over traditional concepts of growth in capital structure theory more so where operational stability and risk minimization are of high importance. To the practitioners especially the financial managers operating in organizations similar to PT Perkebunan Nusantara IV Medan, these findings give emphasis to the aspect of liquidity as adopted in the evaluation of the financial position of the company.

Since managers are more concerned with liquidity than profitability when choosing their companies' capital structure, it is clear that they should pay much attention to their firms' liquidity cushions. It might make much sense in industries with high operational risks or where external financing is not easily available or relatively expensive. Since profitability has a weak influence on capital structure it also means that firms do not necessarily have to look for profits at the expense of liquidity. However, measures that would tend to provide adequate liquidity may be more helpful in the long term and fostering financial stability. This perspective could be especially useful in uncertain economic climates in which the capacity to shift regarding the underlying financial variables is essential.

However, the result which indicates that the variable profit growth does not significantly affect capital structure policies imply that managers of growing firms may need to rethink how growth can be used to underpin the use of more debts. It may, however, move more toward the efficient use of organizational resources and making certain that any growth is sustainable by sound liquidity levels and low levels of risk, thus the increased emphasis on stability over the longer term. They provide some research directions as a result of these findings. In the first place, there is a need to understand why exactly profitability might be less important in

determining capital structure choice in given environments, perhaps by recourse to factors at the industry or more broadly, the economy. Buttressed by such evidence, future studies could thus be directed at parsing industry or economy specific conditions that affect this relationship.

Therefore, the present study also recommends the possibility of a re-investigation of the moderating aspect of profit growth for the capital structure choice over the various industrial sectors or other potential economic situations, the examination of other probable moderating factors such as the market risks, availability of capital markets and structures of corporate governance. There are several ways to extend prior research for future investigation: The first way is to include a broader set of financial values for testing model's coefficients. The second way is to use data of more years to study the dynamics of these relations. Such analyses might give more information about the evolution of the capital structure decisions and could offer better guidelines for both the theory and the practice.

## Conclusion

On the basis of the results of the discussion above, it can be concluded that in the field of agriculture of Nusantara IV in the year 2018 - 2022 the result was obtained that profitability does not have a significant impact on the Capital Structure. Liquidity has a significant influence on capital Structure, Profit Growth is not able to moderate the influence of the variable Profitability on capital structure or can be said to be of no significant impact. And the capital-structure dependent variables are filled jointly – equally by the independent variables of profitability, liquidity, and profit-growth moderation variables. As to the recommendation in this research for further research is to add the variable in this study with other variables, expand the literature to get better and more accurate results, and expand the sample of research both from the corporate sector and the time range of the research.

## References

- Amin, A., Syafaruddin, Muslim, M., & Adil, M. (2022). Pengaruh Rasio Likuiditas, Rasio Leverage, dan Rasio Aktivitas terhadap Pertumbuhan Laba pada Perusahaan Manufaktur Sub Sektor Makanan dan Minuman yang Terdaftar di Bursa Efek Indonesia. *Jurnal Mirai Management*, 7(3), 32–60. <https://doi.org/10.37531/mirai.347878.887>
- Aslah, T. (2020). Pengaruh Profitabilitas, Likuiditas, Struktur Aset Dan Ukuran Perusahaan Terhadap Struktur Modal. *Jurnal Akuntansi Dan Perpajakan Jayakarta*, 2(1), 1–17. <https://doi.org/10.53825/japjayakarta.v2i1.43>
- Azizi, A., Yafiz, M., Anggraini, T., Perbankan Syariah, J., Ekonomi Dan Bisnis Islam, F., & Islam Sumatera Utara, U. (2023). The Effect Of Profitability On The Liquidity Of Islamic Commercial Banks In Indonesia For The Period 2018-2022. *Management Studies and Entrepreneurship Journal*, 4(5), 6640–6652. <http://journal.yrpiiku.com/index.php/msej>
- Cenora, A. (2023). Pengaruh Profitabilitas, Pertumbuhan Penjualan, Likuiditas Dan Umur Perusahaan Terhadap Struktur Modal Di Bursa Efek Indonesia. *Bisma*, 7(9), 1987–1998.
- Dianitha, K. A., Masitoh, E., Siddi, P. (2020). Pengaruh rasio keuangan terhadap pertumbuhan laba pada perusahaan makanan dan minuman di bei. *Jurnal Akuntansi: Transparansi Dan Akuntabilitas*, 8(2), 127–136.

- Efendi, M., & Ts, K. H. (2021). Pengaruh Profitabilitas, Likuiditas, Struktur Aktiva , Ukuran Perusahaan , Dan Tax Avoidance terhadap Struktur Modal. 5(1), 168–175. <https://doi.org/10.33087/ekonomis.v5i1.286>
- Fathoni, R., & Syarifudin, S. (2021). Pengaruh Struktur Modal Terhadap Profitabilitas dengan Ukuran Perusahaan Sebagai Variabel Moderasi (Studi pada Perusahaan dalam Indeks JII Periode 2017-2019). *Jurnal Ilmiah Ekonomi Islam*, 7(3), 1347–1356. <http://digilib.unila.ac.id/id/eprint/31939>
- Hidayah, F. N. (2023). Pengaruh Likuiditas, Struktur Modal Dan Pertumbuhan Laba Terhadap Kualitas Laba Dengan Profitabilitas Sebagai Variabel Moderasi (Studi Kasus Bank Umum Syariah di Indonesia Periode 2018-2022).
- Hutauruk, F. N. (2020). Ukuran Perusahaan sebagai Pemoderasi dalam Hubungan Profitabilitas dan Likuiditas terhadap Struktur Modal Bank Umum Syariah. *EKONOMIKA SYARIAH: Journal of Economic Studies*, 4(2), 136. <https://doi.org/10.30983/es.v4i2.3633>
- Jonnardi, G. G. (2021). Pengaruh Profitabilitas, Struktur Aset, Dan Likuiditas Terhadap Struktur Modal. *Jurnal Paradigma Akuntansi*, 3(3), 1276. <https://doi.org/10.24912/jpa.v3i3.14923>
- Juliana, K. I. T. (2020). Pengaruh Current Ratio, Debt to Equity Ratio, Total Asset Turnover, dan Return on Asset Terhadap Pertumbuhan Laba Pada Perusahaan Sub Sektor Batubara Yang Terdaftar di Bursa Efek Indonesia periode 2016-2018. *Jurnal Riset Manajemen Indonesia*, 2(4), 376–384. [www.idx.co.id](http://www.idx.co.id)
- Magfiroh, U. (2020). Pengaruh Good Corporate Governance Terhadap Hubungan Antara Sustainability Report Dan Nilai Perusahaan (Studi Empiris Pada Perusahaan Listing di BEI Tahun 2014-2016). 39–49. <https://repository.uin-suska.ac.id/13160/>
- Mangantar, A. A., Mangantar, M., & Baramuli, D. N. (2020). Pengaruh return on asset, return on equity dan debt to equity ratio terhadap return saham pada subsektor food and beverage di Bursa Efek Indonesia. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, 8(1).
- Muhammad, G. A., Nasution, Y. S. J., & Harahap, R. D. (2023). Pengaruh Current Ratio, Perputaran Piutang Dan Return On Asset Terhadap Pertumbuhan Aset Asuransi Syariah Di Indonesia: Indonesia. *GEMAH RIPAHA: Jurnal Bisnis*, 3(02), 47-64.
- Mukaromah, D. U., & Suwanti, T. (2022). PENGARUH Profitabilitas, Likuditas Dan Struktur Aset Terhadap Struktur Modal Dengan Ukuran Perusahaan Sebagai Variabel Moderating. In *Jurnal Ilmiah Mahasiswa Akuntansi) Universitas Pendidikan Ganesha (Vol. 13)*.
- Novwedayaningayu, H. C., & Hirawati, H. (2020). Pengaruh Profitabilitas, Likuiditas Dan Struktur Aktiva Terhadap Struktur Modal Pada Perusahaan Consumer Goods. *JSMBI (Jurnal Sains Manajemen Dan Bisnis Indonesia)10, 10(2)*, 255–262.
- Nugraha, B. A., & Riharjo, I. B. (2022). Pengaruh Struktur Modal, Pertumbuhan Laba, Ukuran Perusahaan Terhadap Profitabilitas. *Jurnal Ilmu Dan Riset Akuntansi*, 11(12), 1–24.
- Nugraha, N. M., Susanti, N., & Rhamadan Setiawan, M. (2021). Pengaruh Struktur Modal, Perputaran Modal Kerja, dan Ukuran Perusahaan Terhadap Nilai Perusahaan. *Owner*, 5(1), 208–218. <https://doi.org/10.33395/owner.v5i1.383>

- Nurani, A. T., Setiawan, A., & Susanto, B. (2023). Perbandingan Kinerja Regresi Decision Tree dan Regresi Linear Berganda untuk Prediksi BMI pada Dataset Asthma. *Jurnal Sains Dan Edukasi Sains*, 6(1), 34–43. <https://doi.org/10.24246/juses.v6i1p34-43>
- Nursyahbani, L. (2023). Pengaruh Likuiditas, Profitabilitas, dan Pertumbuhan Penjualan Terhadap Struktur Modal Studi Pada Perusahaan Makanan dan Minuman yang Terdaftar di Bursa Efek Indonesia Periode 2018-2021. *Jurnal Ilmiah Manajemen Kesatuan*, 11(1), 103–110. <https://doi.org/10.37641/jimkes.v11i1.1702>
- Nurwani. (2020). Pengaruh Modal Kerja, Likuiditas, dan Profitabilitas: Perusahaan Hotel, Restoran, dan Pariwisata yang Terdaftar di Bursa Efek Indonesia. *KITABAH*, 4(2).
- Pratama, F. A. N. (2023). Pengaruh Rasio Keuangan terhadap Pertumbuhan Laba dengan Ukuran Perusahaan sebagai Variabel Moderasi pada Perusahaan Subsektor Farmasi yang terdaftar di Bursa Efek Indonesia. *Jurnal Ilmu Manajemen (JIM)*, 11(2), 377–392.
- Putri, E. T & Lisiantara, G. A. (2023). Pengaruh Profitabilitas Dan Likuiditas Terhadap Nilai Perusahaan Dengan Struktur Modal Sebagai Variabel Intervening. *Jurnal Ekonomi, Manajemen Dan Akuntansi*, 2, 91–107.
- Rahmawati, D. E. & S. (2021). Pengaruh Profitabilitas, Likuiditas, Ukuran Perusahaan, Dan Struktur Aset Terhadap Struktur Modal. *Jurnal Riset Mahasiswa Akuntansi*, 9(2). <https://doi.org/10.21067/jrma.v9i2.6079>
- Rosyid, R., & Harsasalam, D. (2022). Sales Growth, Profitabilitas, Dan Ukuran Perusahaan Terhadap Struktur Modal. *Jurnal Penelitian Ekonomi Manajemen dan Bisnis*, 1(3), 01-12. <https://doi.org/10.55606/jekombis.v1i3.421>
- Saragih, M. R., Rokan, K. M., & Inayah, N. (2023). Analisis Rasio Likuiditas, Solvabilitas dan Profitabilitas Sebagai Alat Pengukur Kinerja Keuangan Pada PT. Telkom Indonesia Tbk Tahun 2017-2021. *Jurnal Manajemen Akuntansi (JUMSI)*, 3(4), 2013–2037.
- Sipahutar, R. D., Yusrizal, & Rahmani, N. A. B. (2023). Reslaj : Religion Education Social Laa Roiba Journal Pengaruh Leverage , Profitabilitas , dan Likuiditas terhadap Earning Response Coefficient ( ERC ) pada PT BSI Tbk Reslaj : Religion Education Social Laa Roiba Journal. *Reslaj: Religion Education Social Laa Roiba Journal*, 5(6), 3307–3325. <https://doi.org/10.47476/reslaj.v5i6.1067>
- Sofiani, L., & Siregar, E. M. (2022). Analisis Pengaruh ROA, CR dan DAR Terhadap Nilai Perusahaan Sektor Makanan dan Minuman. *Jurnal Ilmiah Akuntansi Kesatuan*, 10(1), 9–16. <https://doi.org/10.37641/jiakes.v10i1.1183>
- Supeno, A. (2022). Determinasi Nilai Perusahaan dan Struktur Modal: Profitabilitas dan Likuiditas pada Perusahaan Perkebunan di Indonesia. *Jurnal Ekonomi Manajemen Sistem Informasi*, 3(3), 240-256 <https://doi.org/10.31933/jemsi.v3i3>
- Susanto, P. C., Arini, D. U., Yuntina, L., Soehaditama, J. P., & Nuraeni, N. (2024). Konsep Penelitian Kuantitatif: Populasi, Sampel, dan Analisis Data (Sebuah Tinjauan Pustaka). *Jurnal Ilmu Multidisplin*, 3(1), 1-12.
- Susyana, F. I. & Nugraha, N. M. (2020). Prngaruh Net Profit Margin, Return On Assets, Dan Current Ratio Terhadap Pertumbuhan Laba. *JEMPER (Jurnal Ekonomi Manajemen Perbankan)*, 3(1), 56–69. <http://jurnal.usbypkp.ac.id/index.php/jemper>

- Umdiana, N., & Claudia, H. (2020). Analisis Struktur Modal Berdasarkan Trade Off Theory. *Jurnal Akuntansi: Kajian Ilmiah Akuntansi*, 7(1), 52-70.
- Zaen, R. I., & Nur, D. I. (2024). Dampak Rasio Keuangan terhadap Profitabilitas dengan Pertumbuhan Laba sebagai Variabel Moderasi pada Perusahaan Sektor Healthcare yang Terdaftar di Bursa Efek Indonesia. *J-MAS (Jurnal Manajemen dan Sains)*, 9(1), 9-18. <https://doi.org/10.33087/jmas.v9i1.1125>
- Zulfi, D. S. A., & Widyawati, D. (2021). Pengaruh Debt to Equity Ratio, Return on Asset, dan Kepemilikan Manajerial Terhadap Nilai Perusahaan. *Jurnal Ilmu Dan Riset Akuntansi*, 10(10), 1–18.