# The Influence of Profitability, Liquidity, Firm Size, Capital Structure and Efficiency on Financial Performance of Food and Beverages Sub-Sector on IDX

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## Abstract

This study aims to analyze the effect of profitability, liquidity, firm size, capital structure, and company efficiency on financial performance in the Food and Beverages sub-sector during the period 2019–2024. This research uses a quantitative method with a causal approach. The sampling technique used is purposive sampling. The analysis method employed is multiple linear regression, with a total sample of 138 obtained from the financial statements of companies in the Food and Beverages sub-sector listed on the Indonesia Stock Exchange during the 2019–2024 period. The study utilizes the ratios of Net Profit Margin (NPM), Current Ratio (CR), Firm Size, Debt to Equity Ratio (DER), Total Asset Turnover (TATO), and Return on Assets (ROA). The results indicate that the profitability variable (NPM) and company efficiency (TATO) have a positive and significant partial effect on financial performance (ROA). Meanwhile, the liquidity variable (CR) and firm size have a negative and significant partial effect on financial performance. Capital structure, on the other hand, does not have a partial effect on financial performance (ROA). Furthermore, all five independent variables simultaneously have a significant effect on financial performance.

**Keywords:** NPM, Current Ratio, Firm Size, TATO, ROA

## 1. Introduction

A company's financial performance reflects its financial condition and serves as the basis for stakeholder decision-making (Nurriyah et al., 2022). The Indonesia Stock Exchange (IDX), as a capital market regulator, demands a high degree of transparency and accountability from publicly listed companies. In line with market developments and the need for a more representative classification, the Indonesia Stock Exchange (IDX) has replaced the sector classification system from JASICA, which previously had 9 sectors, with the IDX Industrial Classification (IDX-IC), consisting of 12 main sectors, along with 35 subsectors, 69 industries, and 130 sub-industries. This change includes new groupings and adjustments to sector names For example, the food and beverage subsector, which was previously classified under the Consumer Goods sector, is now categorized under the Consumer Non-Cyclicals sector according to the IDX-IC classification. The food and beverage subsector holds significant importance due to its substantial contribution to the national economy and its role in fulfilling the basic needs of society.

The primary consumer sector includes several subsectors such as pharmaceuticals, tobacco, household necessities, and food and beverages. This study specifically focuses on the food and beverages subsector. The selection is based on its significant contribution to the national economy. According to data from the Ministry of Industry, the food and beverages subsector contributed 38.4% to the non-oil and gas manufacturing industry's output in 2024 (Kementerian Perindustrian, 2024). In addition, this subsector has a larger number of listed companies compared to other subsectors, and these companies consistently publish more complete financial reports, making them more suitable for statistical analysis.

**Average ROA of the Food and Beverage Industry, 2019–2023**
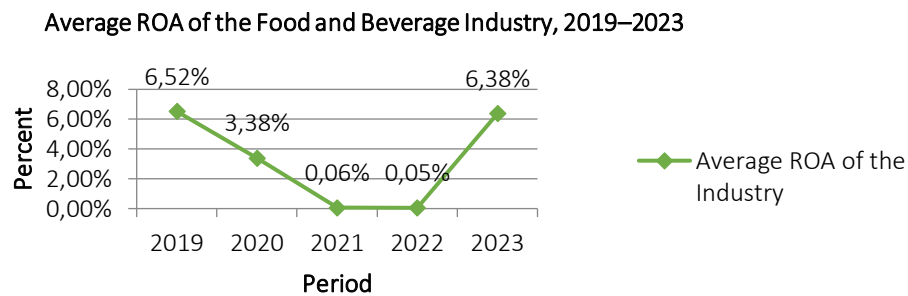


**Chart 1.** Average ROA of the Food and Beverage Industry 2019–2023

The food and beverages sub-sector is selected due to its relative stability despite economic fluctuations and a high dependency on imported raw materials (Sulaeman, 2024). This dependency makes the profit margins of companies vulnerable to global conditions, which can negatively affect financial performance, including the Return on Assets (ROA) ratio (Bursa Efek Indonesia, 2023). The Return on Assets (ROA) ratio experienced a significant decline from 2020 to 2022 due to the pandemic, as shown in Chart 1 above. This is further supported by the increasing number of companies listed on the Indonesia Stock Exchange up to the most recent year, 2024. In addition, this sub-sector was significantly affected during the pandemic, which has heightened the urgency to evaluate the determining factors of financial performance (Badan Pusat Statistik, 2020). As a primary needs sub-sector, the food and beverages industry generally maintains stable demand even during economic downturns. Therefore, it is often considered more resilient to economic shocks and attractive to investors seeking stability (Azizah Binti Hamzah & Murdifin, 2025).

Previous studies have shown inconsistent findings regarding the effects of profitability, liquidity, firm size, capital structure, and efficiency on financial performance. Previous research (Lutfiana & Hermanto, 2021) found that NPM has a positive effect on financial performance, whereas Previous research (Teng et al., 2022) reported a negative effect. Previous research (Wulandari et al., 2020) found a significantly positive effect of liquidity, but Previous research (Lestari, 2020) found no significant influence of the Current Ratio on financial performance. Previous research (Arisanti, 2020) m found that firm size has a significant positive effect, while. Previous research (Lestari, 2020) suggested no such influence. Regarding capital structure. Previous research (Arisanti, 2020) identified a significantly positive effect of DER, in contrast to previous research (Teng et al., 2022) who found a negative relationship. Previous research (Wulandari et al., 2020) reported that efficiency (TATO) has a significant partial effect. Previous research (Munawwaroh & Maqsudi, 2023) found it to be insignificant

These inconsistencies have prompted further research to examine the influence of profitability, liquidity, firm size, capital structure, and firm efficiency on financial performance in the food and beverages sub-sector listed on the IDX during the 2019–2024 period. This study applies a quantitative causal approach using multiple linear regression analysis. According to financial statement analysis theory, these independent variables are logically associated with the financial performance of firms.

The hypotheses proposed in this study are as follows:
H1: Profitability is partially predicted to have a positive effect on financial performance.
H2: Liquidity is partially predicted to affect financial performance.
H3: Firm size is partially predicted to affect financial performance.
H4: Capital structure is partially predicted to affect financial performance.
H5: Firm efficiency is partially predicted to affect financial performance.
H6: Profitability, liquidity, firm size, capital structure, and firm efficiency are simultaneously predicted to affect financial performance.

## 2. Methods

This study employs a quantitative research method with a causal approach, which aims to identify the cause-and-effect relationships among the variables under investigation. The research was conducted on the Food and Beverage sub-sector during the 2019–2024 period. The research methodology follows several stages, which are illustrated in the following flowchart of the research process:
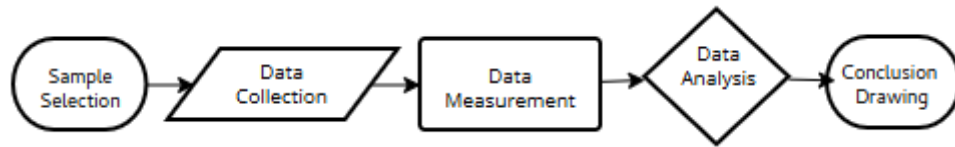
**Picture 2.1** Research Flow Diagram

The figure above illustrates the research flow, which begins with sample selection using a purposive sampling approach. The next stage involves data collection, which is conducted through publicly available sources on the official website of the Indonesia Stock Exchange (www.idx.co.id). The data obtained is secondary data in the form of financial statements from companies in the Food and Beverage sub-sector, based on the selected sample. The financial statement data is measured using independent variable proxies based on financial ratios. This data is then analyzed using the appropriate analytical methods. The results of the data analysis are used to conclude whether the variables have a significant influence or not.

**Sample Selection**

The population in this study consists of all companies in the food and beverage sub-sector listed on the Indonesia Stock Exchange (IDX). Based on the data collected, the population used in this study includes 98 companies. The sample was selected using a purposive sampling approach. Purposive sampling is a sampling technique used in research by applying specific predetermined criteria for sample selection (Sugiyono, 2024).

In this study, the criteria or samples used are as follows:

1) Food and Beverage companies that published their financial statements on the Indonesia Stock Exchange during the period 2019–2024.
2) Food and Beverage Companies that used the Indonesian Rupiah (IDR) as the reporting currency in their financial statements from 2019 to 2024.
3) Food and Beverage Companies that reported positive net income during the period 2019–2024.

**Data Collection**

The data collection method used in this study is literature study. This method is conducted by gathering information relevant to the research topic from sources such as books, journals, reports, electronic documents, or existing research. The data were obtained by accessing the official website of the Indonesia Stock Exchange (IDX) (www.idx.co.id). The purpose of this data collection is to obtain financial data from companies that meet the sample criteria and are classified under the Food and Beverage sub-sector. The company data collected includes total assets, current assets, current liabilities, total liabilities, total equity, positive net income, and net sales for the period 2019–2024.

**Data Measurement**

The data in this study were measured using proxy formulas for profitability, liquidity, firm size, capital structure, and firm efficiency. In this study, the profitability ratio is proxied using the Net Profit Margin (NPM) formula, as explained by (Kasmir, 2021):

$$Net\ Profit\ Margin\ (NPM) = \frac{Net\ Income\ After\ Tax}{Net\ Sales} \times 100\%$$

The liquidity ratio is proxied using the Current Ratio (CR) formula, as described by (Kasmir, 2021):

$$Current\ Ratio\ (CR) = \frac{Current\ Assets}{Current\ Liabilities}$$

Firm size is proxied using the Natural Logarithm (Ln) of total assets, following (Goh, 2023):

$$Firm\ Size = Ln\ (Total\ Assets)$$

The capital structure ratio is proxied using the Debt to Equity Ratio (DER), as defined by (Kasmir, 2021):

$$Debt\ to\ Equity\ Ratio\ (DER) = \frac{Total\ Liabilities}{Total\ Equity} \times 100\%$$

The firm efficiency ratio is proxied using the Total Asset Turnover Ratio (TATO), as described by (Kasmir, 2021):

$$Total\ Asset\ Turn\ Over\ Ratio\ (\text{TATO}) = \frac{Net\ Sales}{Total\ Assets}$$

The financial performance in this study is measured using the Return on Assets (ROA) ratio, as explained by (Brigham & Houston, 2006):

$$Return\ on\ Assets\ (\text{ROA}). = \frac{Net\ Income}{Total\ Assets} \times 100\%$$

**Data Analysis**

This study employs several data analysis methods, including descriptive statistics, classical assumption tests, multiple linear regression, hypothesis testing, and coefficient of determination testing, with the assistance of SPSS version 25. (Sugiyono, 2024) descriptive statistical analysis is a method used to describe data without making general conclusions. The data include measures such as the mean, standard deviation, minimum value, and maximum value of each variable used in the study.

The classical assumption tests in this study consist of four types: normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test. The normality test is conducted using the Kolmogorov-Smirnov test. The multicollinearity test is based on Tolerance values and the Variance Inflation Factor (VIF). The heteroscedasticity test is carried out using the White test, while the autocorrelation test is conducted using both the Durbin-Watson test and the Cochrane-Orcutt Step 1 test. In addition, hypothesis testing consists of both partial tests and simultaneous tests.

**Conclusion Drawing**

The conclusion stage refers to drawing conclusions based on the results of the data analysis conducted previously, in accordance with the decision-making criteria of each test. This stage represents the final step in the research process, which involves interpreting the analyzed data. After presenting the statistical findings, the results can be used as valuable information for various stakeholders.

## 3. Results and Discussion

**Overview Of The Research Object**

| Description | Amount |
|---|---|
| Population: Food and Beverage companies listed on the IDX | 98 |
| Criteria: | |
| 1. Food and Beverage Companies that did not publish financial reports from 2019 to 2024 | (60) |
| 2. Food and Beverage Companies that did not use Rupiah (IDR) as their reporting currency from 2019 to 2024 | (2) |
| 3. Food and Beverage Companies that did not report a profit from 2019 to 2024 | (18) |
| Final Sample | 23 |
| Total Observation (25 Companies x 6 Years) | 138 |

**Table 3.1** Sample Selection Results Using the Purposive Sampling Approach
Source: Processed secondary data 2025

Based on Table above, the number of observations in this study was determined using purposive sampling. The sample was selected according to the specified criteria, resulting in a total of 138 data points. These data were then used for the statistical analysis in this study.

**Descriptive Statistics**

| | N | Minimum | Maximum | Mean | Std, Deviation |
|---|---|---|---|---|---|
| Net Profit Margin | 138 | 0,37 | 38,42 | 11,2867 | 8,58993 |
| Current Ratio | 138 | 0,39 | 13,40 | 3,2693 | 2,88715 |
| Firm Size | 138 | 27,37 | 32,94 | 29,7363 | 1,46533 |
| Debt to Equity Ratio | 138 | 7,20 | 493,50 | 81,8543 | 70,74144 |
| Total Assets Turn Over | 138 | 0,28 | 4,46 | 1,1204 | 0,77332 |
| Rerurn on Assets | 138 | 0,10 | 41,63 | 9,7198 | 6,32201 |
| Valid N (listwise) | 138 | | | | |

**Table 3.2.** Descriptive Statistics
Source: Processed secondary data 2025

The results of the descriptive statistics above indicate variation among variables. This means the data distribution in the study has relatively low dispersion, suggesting that the data is stable. This also reflects that the financial conditions and performance among food and beverage companies during 2019–2024 vary, which could be due to differences in strategies and operations.

**Classical Assumtion Test**
**Normality Test**

| One-Sample Kolmogorov-Smirnov Test | | Unstandardized Residual |
|---|---|---|
| N | | 138 |
| Normal Parameters[a,b] | Mean | 0,0000000 |
| | Std. Deviation | 0,24479408 |
| Most Extreme Differences | Absolute | 0,094 |
| | Positive | 0,094 |
| | Negative | -0,079 |
| Test Statistic | | 0.094 |
| Asymp. Sig. (2-tailed) | | 0.004[c] |
| Monte Carlo Sig. (2-tailed) | Sig. | 0,161[d] |
| | 99% Confidence Interval  Lower Bound | 0,152 |
| | Upper Bound | 0,171 |

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. Based on 10000 sampled tables with starting seed 926214481.

**Table 3.3.** Kolmogorov-Smirnov Test with Monte Carlo Approach
Source: Processed secondary data 2025

Based on Table 3.3, it can be concluded that the data passed the normality test and is normally distributed. This is indicated by the Monte Carlo significance value of 0.161, which is greater than 0.05. This finding is further supported by the large sample size (> 50 observations, specifically 138), which allows the data to be considered normally distributed.

**Multicolinearity Test**

| Coefficients[a] | | Collinearity Statistics | |
|---|---|---|---|
| Model | | Tolerance | VIF |
| 1 | Net Profit Margin | 0,643 | 1,556 |
| | Current Ratio | 0,732 | 1,365 |
| | Firm Size | 0,713 | 1,403 |
| | Debt to Equity Ratio | 0,713 | 1,402 |
| | Total Assets Turn Over | 0,679 | 1,472 |

a. Dependent Variable: Rerurn on Assets

**Table 3.4.** Multicolinearity Test
Source: Processed secondary data 2025

The calculation results in Table 3.4 show that all independent variables have a Tolerance value > 0.10 and a VIF < 10. Therefore, it can be concluded that this test is acceptable, and there is no indication of multicollinearity among the independent variables in the regression model.

**Heteroscedasticity Test**

| | | Coefficients[a] | | | | |
|---|---|---|---|---|---|---|
| | | Unstandardized Coefficients | | Standardized Coefficients | | |
| Model | | B | Std. Error | Beta | t | Sig. |
| 1 | (Constant) | -8,365 | 3,578 | | -2,338 | 0,021 |
| | Net Profit Margin | 0,164 | 0,020 | 0,693 | 8,107 | 0,000 |
| | Current Ratio | 0,176 | 0,057 | 0,250 | 3,114 | 0,002 |
| | Firm Size | 0,210 | 0,113 | 0,151 | 1,855 | 0,066 |
| | Debt to Equity Ratio | 0,005 | 0,002 | 0,161 | 1,986 | 0,049 |
| | Total Assets Turn Over | 1,046 | 0,219 | 0,397 | 4,769 | 0,000 |
| a. Dependent Variable: ABS_RES | | | | | | |

**Tabel 3.5.** Heteroscedasticity-Glejser Test
Source: Processed secondary data 2025

Based on Table 3.5, it is shown that the variables Net Profit Margin, Current Ratio, Debt to Equity Ratio, and Total Asset Turnover exhibit symptoms of heteroscedasticity. This is indicated by their significance values: Net Profit Margin (0.000), Current Ratio (0.002), Debt to Equity Ratio (0.049), and Total Asset Turnover (0.000). Therefore, the researcher conducted an alternative heteroscedasticity test using the White test method.

**Model Summary**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | 0,706[a] | 0,499 | 0,413 | 16,09539 |
| a. Predictors: (Constant), X4X5, X1X5, X2X5, X2X4, X1X2, X3_KUADRAT, X4_KUADRAT, X1X4, X2_KUADRAT, X5_KUADRAT, X1_KUADRAT, X3X4, X1X3, X3X5, Current Ratio, X2X3, Net Profit Margin, Firm Size, Debt to Equity Ratio, Total Assets Turn Over | | | | |

**Table 3.6** White Test
Source: Processed secondary data 2025

The basis for decision-making in the White test is as follows: if the calculated chi-square value ($\chi^2$ count) is less than the chi-square critical value from the table ($\chi^2$ table), it indicates no heteroscedasticity; conversely, if the $\chi^2$ count is greater than the $\chi^2$ table, it indicates the presence of heteroscedasticity. The calculated chi-square value is obtained using the formula: $\chi^2 = n \times R^2$, where n is the number of observations. Based on this calculation, the $\chi^2$ count is 68.862. The critical chi-square value ($\chi^2$ table) is taken from the chi-square distribution table with degrees of freedom (df = n – 1 = 138 – 1 = 137.48) and a significance level of 5%, resulting in a value of 165.315. Since 68.862 < 165.315, it can be concluded that the data does not exhibit heteroscedasticity.

**Autocorelation Test**

| | | | Model Summary[b] | | |
|---|---|---|---|---|---|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| 1 | 0,900[a] | 0,810 | 0,803 | 2,80761 | 1,374 |
| a. Predictors: (Constant), Total Assets Turn Over, Debt to Equity Ratio, Firm Size, Current Ratio, Net Profit Margin | | | | | |
| b. Dependent Variable: Return on Assets | | | | | |

**Table 3.7.** Durbin-Watson Test
Source: Processed secondary data 2025

Based on the calculation, it can be stated that the Durbin-Watson test still indicates symptoms of negative autocorrelation. This is shown by the dU value of 1.7971 and (4 – dL) value of 2.3539, which are both greater than the Durbin-Watson statistic of 1.374. Therefore, it can be concluded that the null hypothesis is not rejected, and autocorrelation is still present. To address this issue, the

researcher applied the Cochrane-Orcutt Step 1 method to correct the violation of this classical assumption.

| | Coefficients[a] | | | | | |
| | Unstandardized Coefficients | | Standardized Coefficients | | | |
| Model | B | Std. Error | Beta | t | Sig. |
| --- | --- | --- | --- | --- | --- |
| 1 (Constant) | 0,004 | 0,226 | | 0,018 | 0,986 |
| Ut_1 | 0,310 | 0,082 | 0,308 | 3,762 | 0,000 |
| a. Dependent Variable: Unstandardized Residual | | | | | |

**Table 3.8.** Cochrane-Orcutt Step 1 Test
Source: Processed secondary data 2025

Based on the table above, the coefficient value of the variable Ut_1 (transformed residual variable) is 0.310. Subsequently, a second Durbin-Watson test was conducted to re-examine the presence of autocorrelation.

| | | | Model Summary[b] | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| --- | --- | --- | --- | --- | --- |
| 1 | 0,308[a] | 0,095 | 0,088 | 2,64070813 | 2,136 |
| a. Predictors: (Constant), Ut_1 | | | | | |
| b. Dependent Variable: Unstandardized Residual | | | | | |

**Table 3.9.** Second Durbin-Watson Test
Source: Processed secondary data 2025

From the table, it can be concluded that the Durbin-Watson value increased to 2.136. When compared to the result from Table 3.7 (first Durbin-Watson test), which was 1.374, it indicates that the regression model no longer shows signs of autocorrelation and is therefore appropriate for further use.

**Multiple Linier Regression**

| | Coefficients[a] | | | | |
| | Unstandardized Coefficients | | Standardized Coefficients | | |
| Model | B | Std. Error | Beta | t | Sig. |
| --- | --- | --- | --- | --- | --- |
| 1 (Constant) | 11,058 | 6,142 | | 1,800 | 0,074 |
| Net Profit Margin | 0,714 | 0,035 | 0,970 | 20,493 | 0,000 |
| Current Ratio | -0,335 | 0,097 | -0,153 | -3,447 | 0,001 |
| Firm Size | -0,440 | 0,194 | -0,102 | -2,267 | 0,025 |
| Debt to Equity Ratio | 0,001 | 0,004 | 0,009 | 0,208 | 0,835 |
| Total Assets Turn Over | 4,198 | 0,376 | 0,513 | 11,153 | 0,000 |
| a. Dependent Variable: Rerurn on Assets | | | | | |

**Table 3.10.** Multiple Linier Regression Results
Source: Processed secondary data 2025

The multiple linear regression equation in this study is as follows:
$$Y = \alpha + \beta 1 X1 + \beta 2 X2 + \beta 3 X3 + \beta 4 X4 + \beta 5 X5 + e$$
$$Y = 11{,}058 + 0{,}714\, X1 - 0{,}335\, X2 - 0{,}440\, X3 + 0{,}001\, X4 + 4{,}198\, X5 + e$$
The equation in table 3.10 can be interpreted as follows:
1) a = constant of 11.058, which means that if all independent variables are equal to 0 or held constant, the predicted value of Financial Performance (ROA) is estimated to be 11.058
2) The regression coefficient of Net Profit Margin ($X_1$) is 0.714, meaning that if the Net Profit Margin increases by one unit, assuming other variables remain constant, Return on Assets (ROA) will increase by 0.714. The significance value of 0.000 indicates alignment with the theory that higher profitability enhances the effectiveness of asset utilization in generating profit
3) The regression coefficient of Current Ratio ($X_2$) is -0.335, meaning that if the Current Ratio increases by one unit, ROA will decrease by 0.335. This indicates that higher liquidity can significantly reduce financial performance. A high Current Ratio may reflect the accumulation of unproductive current assets, which do not directly contribute to profit

4) The regression coefficient of Firm Size ($X_3$) is -0.440, indicating that if Firm Size increases by one unit, ROA will decrease by 0.440. This result shows that large companies do not necessarily have higher ROA. This can be explained by the diseconomies of scale theory, which suggests that as a company grows, coordination and bureaucracy costs increase, thereby reducing efficiency. Large firms tend to have greater assets, but not all are optimally used to generate profit

5) The regression coefficient of Debt to Equity Ratio ($X_4$) is 0.001, meaning that an increase in DER by one unit will reduce ROA by 0.001. This result indicates that changes in the Debt to Equity Ratio have little impact on the company's financial performance

6) The regression coefficient of Total Asset Turnover ($X_5$) is 4.198, meaning that an increase in Total Asset Turnover by one unit will increase ROA by 4.198. Higher efficiency in utilizing assets to generate sales will significantly improve the company's financial performance (ROA)

7) e = Error, referring to other factors outside of the variables NPM, CR, Firm Size, DER, and TATO that may influence ROA. These errors may include the effects of other variables not included in this study, such as macroeconomic conditions, inflation, or more specific industry-related factors.

**Hypothesis Test**
**Partial Test (t-test)**

| | | Coefficients[a] | | | | |
|---|---|---|---|---|---|---|
| | | Unstandardized Coefficients | | Standardized Coefficients | | |
| Model | | B | Std. Error | Beta | t | Sig. |
| 1 | (Constant) | 11,058 | 6,142 | | 1,800 | 0,074 |
| | Net Profit Margin | 0,714 | 0,035 | 0,970 | 20,493 | 0,000 |
| | Current Ratio | -0,335 | 0,097 | -0,153 | -3,447 | 0,001 |
| | Firm Size | -0,440 | 0,194 | -0,102 | -2,267 | 0,025 |
| | Debt to Equity Ratio | 0,001 | 0,004 | 0,009 | 0,208 | 0,835 |
| | Total Assets Turn Over | 4,198 | 0,376 | 0,513 | 11,153 | 0,000 |
| a. Dependent Variable: Rerurn on Assets | | | | | | |

**Table 3.11**. Partial Test Result
Source: Processed secondary data 2025

The detailed explanation of the partial test (t-test) results from the table above is as follows:
1) Hypothesis Testing H1: Profitability (X1) has a significant effect on Financial Performance (Y)
Based on the t-test results in the table above, the significance value is 0.000, which is less than 0.05, with a t-value of 20.493 and a regression coefficient of 0.714. This indicates that Net Profit Margin (NPM) has a positive and significant partial effect on Return on Assets (ROA). Therefore, hypothesis H1 is accepted and the null hypothesis (H0) is rejected.

2) Hypothesis Testing H2: Liquidity (X2) has an effect on Financial Performance (Y)
The significance value is 0.001, less than 0.05, with a t-value of -3.447 and a regression coefficient of -0.335. This means that the Current Ratio (CR) has a negative and significant partial effect on ROA. Thus, hypothesis H2 is accepted and the null hypothesis is rejected

3) Hypothesis Testing H3: Firm Size (X3) has an effect on Financial Performance (Y)
The significance value is 0.025, less than 0.05, with a t-value of -2.267 and a regression coefficient of -0.440. This shows that Firm Size has a negative and significant partial effect on ROA. Therefore, hypothesis H3 is accepted and the null hypothesis is rejected.

4) Hypothesis Testing H4: Capital Structure (X4) has a significant effect on Financial Performance (Y)
coefficient of 0.001. This indicates that the Debt to Equity Ratio (DER) has no significant partial effect on ROA. Hence, hypothesis H4 is rejected and the null hypothesis is accepted.

5) Hypothesis Testing H5: Company Efficiency (X5) has an effect on Financial Performance (Y)
The significance value is 0.000, less than 0.05, with a t-value of 11.153 and a regression coefficient of 4.198. This means that Total Asset Turnover (TATO) has a positive and significant partial effect on ROA. Therefore, hypothesis H5 is accepted and the null hypothesis is rejected.

**Simultaneous Test (F-Test)**

| | | ANOVA[a] | | | | |
|---|---|---|---|---|---|---|
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 4435.070 | 5 | 887.014 | 112.527 | 0.000[b] |
| | Residual | 1040.512 | 132 | 7.883 | | |

| | | | |
|---|---|---|---|
| Total | 5475.581 | 137 | |

a. Dependent Variable: Rerurn on Assets

b. Predictors: (Constant), Total Assets Turn Over, Debt to Equity Ratio, Firm Size, Current Ratio, Net Profit Margin

**Table 3.12.** Simultaneous Test
Source: Processed secondary data 2025

Based on the table above, the results of the simultaneous test show an F-value of 112.527 with a significance value of 0.000. Since this value is less than 0.05, it can be concluded that the regression model used is simultaneously significant. In other words, the variables Net Profit Margin, Current Ratio, Firm Size, Debt to Equity Ratio, and Total Asset Turnover jointly have a significant effect on Return on Assets. Therefore, hypothesis H6 is accepted, and the null hypothesis (H0) is rejected.

**Coefficients of Determination ($R^2$ Test)**

**Model Summary**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | 0,900[a] | 0,810 | 0,803 | 2,80761 |

a. Predictors: (Constant), Total Assets Turn Over, Debt to Equity Ratio, Firm Size, Current Ratio, Net Profit Margin

**Table 3.13.** Coefficients of Determinasi ($R^2$ Test)
Source: Processed secondary data 2025

Based on the table above, the Adjusted R Square value is 0.803, which indicates that 80.3% of the variation in the company's financial performance can be explained by the independent variables in the regression model (Net Profit Margin, Current Ratio, Firm Size, Debt to Equity Ratio, and Total Asset Turnover) collectively. The remaining 19.7% is explained by other factors not included in this model. Thus, an Adjusted R Square value of 0.803 can be categorized as a regression model with very strong predictive power, as it is close to 1.

## 4. Conclusion

This study found that profitability (NPM) and company efficiency (TATO) have a positive and significant partial effect on financial performance (ROA). Meanwhile, liquidity (Current Ratio) and firm size (Firm Size) have a negative and significant partial effect on ROA. On the other hand, capital structure (DER) does not have a significant effect on ROA. Collectively, profitability, liquidity, firm size, capital structure, and company efficiency have a simultaneous significant effect on financial performance (ROA). These findings prove that the five independent variables are crucial factors that must be considered to improve the financial performance of companies in the Food and Beverages sub-sector in Indonesia.

These results suggest that higher profitability and greater efficiency in utilizing assets lead to better financial performance. Conversely, excessive liquidity and larger firm size tend to reduce asset returns, which may be due to inefficient cash management or underutilized assets in large-scale operations. Therefore, management must maintain an optimal liquidity level to avoid idle cash and effectively manage large-scale assets to prevent inefficiencies.

Practical implications of this study highlight the importance of focusing on improving profit margins and asset efficiency in managing financial performance within the food and beverage sub-sector, especially in the face of economic fluctuations and dependency on imported raw materials. Investors are also advised to prioritize profitability and efficiency indicators in their investment decision-making while also being cautious of large firms that may not be proportionally productive with respect to their assets.

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