

# The Effect of Working Capital Turnover, Debt to Asset Ratio, and Fixed Asset Turnover on Return on Assets in F&B Companies Listed on the IDX from 2019 to 2023

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## ABSTRACT

### Keywords:

Working Capital Turnover, Debt to Asset Ratio, Fixed Asset Turnover, Return on Assets.

This research analyzes the influence of Working Capital Turnover (WCT), Debt to Asset Ratio (DAR), and Fixed Asset Turnover (FATO) on Return on Assets (ROA) in F&B companies listed on the IDX from 2019 to 2023. Adopting a quantitative approach with panel data, the study utilizes panel data regression, classical assumption tests, t-tests, F-tests, and the coefficient of determination. The findings indicate that WCT and FATO positively impact ROA but not significantly, whereas DAR has a significant negative effect. Collectively, these three variables do not exhibit a significant effect on ROA.



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## INTRODUCTION

Company profitability represents long-term performance and is evaluated through profitability ratios, which assess the ability to generate profits and management efficiency. This study employs Return on Assets (ROA) as a key indicator to measure how effectively a company utilizes its assets. A higher ROA signifies improved asset management and profitability. The efficiency of asset utilization can be analyzed through working capital turnover, the debt-to-asset ratio, and fixed asset turnover, which compare sales to asset investments to achieve an optimal balance.

Table 1 below presents the relationship between the independent variables and the dependent variable in Food and Beverage companies listed on the IDX during the 2019-2023 period. It highlights the impact of Working Capital Turnover (WCT), Debt to Asset Ratio (DAR), and Fixed Asset Turnover (FATO) on Return on Assets (ROA). Additionally, the table provides an overview of the performance of both the independent and dependent variables throughout the 2019-2023 timeframe.

Table 1. Performance of WCT, DAR, Rixed Asset Turnover, and ROA variables.

| No | Company                               | Year | WCT    | DAR   | FATO  | ROA   |
|----|---------------------------------------|------|--------|-------|-------|-------|
| 1  | PT. Indofood CBP Sukses Makmur Tbk    | 2019 | 4,200  | 0,050 | 3,730 | 0,138 |
|    |                                       | 2020 | 4,000  | 0,300 | 4,110 | 0,071 |
|    |                                       | 2021 | 2,840  | 0,349 | 4,000 | 0,067 |
|    |                                       | 2022 | 3,000  | 0,393 | 4,460 | 0,049 |
|    |                                       | 2023 | 2,580  | 0,363 | 4,670 | 0,071 |
| 2  | PT. Mayora Indah Tbk                  | 2019 | 2,760  | 0,200 | 5,350 | 0,107 |
|    |                                       | 2020 | 2,610  | 0,100 | 4,000 | 0,106 |
|    |                                       | 2021 | 3,770  | 0,130 | 1,400 | 0,060 |
|    |                                       | 2022 | 3,350  | 0,170 | 4,610 | 0,080 |
|    |                                       | 2023 | 3,100  | 0,150 | 3,850 | 0,140 |
| 3  | PT. Ultra Jaya Milk Industry Tbk.     | 2019 | 2,160  | 0,040 | 4,000 | 0,150 |
|    |                                       | 2020 | 1,820  | 0,170 | 3,470 | 0,120 |
|    |                                       | 2021 | 2,000  | 0,080 | 3,000 | 0,170 |
|    |                                       | 2022 | 2,420  | 0,080 | 3,380 | 0,130 |
|    |                                       | 2023 | 2,300  | 0,010 | 3,530 | 0,150 |
| 4  | PT. Nippon Indosari Corpindo Tbk.     | 2019 | 4,340  | 0,080 | 1,310 | 0,050 |
|    |                                       | 2020 | 2,800  | 0,140 | 1,310 | 0,030 |
|    |                                       | 2021 | 4,100  | 0,120 | 1,310 | 0,060 |
|    |                                       | 2022 | 5,840  | 0,140 | 1,570 | 0,100 |
|    |                                       | 2023 | 7,700  | 0,160 | 1,500 | 0,080 |
| 5  | PT. Siantar Top Tbk.                  | 2019 | 4,640  | 0,080 | 3,120 | 0,160 |
|    |                                       | 2020 | 4,370  | 0,002 | 2,500 | 0,180 |
|    |                                       | 2021 | 2,800  | 0,010 | 2,730 | 0,160 |
|    |                                       | 2022 | 3,270  | 0,001 | 3,110 | 0,130 |
|    |                                       | 2023 | 1,600  | 0,001 | 2,900 | 0,000 |
| 6  | PT. Garuda Food Putra Putri Jaya Tbk. | 2019 | 12,000 | 0,170 | 3,000 | 0,080 |
|    |                                       | 2020 | 7,000  | 0,320 | 2,260 | 0,030 |
|    |                                       | 2021 | 10,000 | 0,280 | 2,750 | 0,001 |
|    |                                       | 2022 | 7,730  | 0,300 | 3,300 | 0,001 |
|    |                                       | 2023 | 7,250  | 0,200 | 3,380 | 0,001 |
| 7  | PT. Indofood Sukses Makmur Tbk.       | 2019 | 2,850  | 0,140 | 1,300 | 0,060 |
|    |                                       | 2020 | 7,800  | 0,300 | 1,780 | 0,053 |
|    |                                       | 2021 | 7,200  | 0,110 | 2,120 | 0,060 |
|    |                                       | 2022 | 4,500  | 0,110 | 2,330 | 0,050 |
|    |                                       | 2023 | 3,700  | 0,108 | 2,360 | 0,060 |
| 8  | PT. Multi Bintang Indonesia Tbk.      | 2019 | 5,700  | 0,008 | 1,580 | 0,260 |
|    |                                       | 2020 | 5,530  | 0,200 | 0,800 | 0,000 |
|    |                                       | 2021 | 2,630  | 0,100 | 0,800 | 0,100 |
|    |                                       | 2022 | 4,350  | 0,100 | 1,500 | 0,260 |
|    |                                       | 2023 | 21,000 | 0,160 | 2,000 | 0,230 |
| 9  | PT. Sariguna Primatirta Tbk           | 2019 | 30,000 | 0,200 | 1,170 | 0,100 |
|    |                                       | 2020 | 9,120  | 0,160 | 0,970 | 0,100 |
|    |                                       | 2021 | 11,300 | 0,096 | 1,000 | 0,130 |
|    |                                       | 2022 | 8,000  | 0,180 | 1,120 | 0,110 |
|    |                                       | 2023 | 22,900 | 0,200 | 1,300 | 0,130 |

Source: IDX 2019-2023 period

Table 1 above highlights several problematic phenomena. In the Working Capital Turnover (WCT) variable, the WCT value consistently declined from 2019 to 2023, as seen in Indofood CBP. Meanwhile, fluctuations in WCT values occurred in companies such as Mayora Indah, Ultra Jaya, Siantar Top, Garuda Food, and Indofood Sukses Makmur. WCT is a key ratio used to assess a company's ability to generate profits by comparing total sales with current assets and liabilities. If total sales exceed current liabilities and assets, WCT increases. Conversely, a lower WCT indicates reduced total sales. Since sales are a crucial component of WCT, any decline in sales leads to a drop in WCT, ultimately affecting company profitability. According to (Sandi, 2022), higher working capital turnover contributes to higher company profits. Additionally, issues arise in the relationship between WCT and Return on Assets (ROA). Ideally, these variables should move in the same direction – when WCT increases, ROA should also increase, and when WCT decreases, ROA should follow suit.

A unidirectional relationship was identified in companies such as Mayora Indah, Ultra Jaya, and Nippon Indosari, where an increase in WCT did not lead to a higher ROA. (Allen & Sack, 2021) stated that excessive debt can reduce ROA due to high interest expenses. Although the Debt to Asset Ratio (DAR) among F&B companies declined from 2019 to 2023, ROA also decreased, which contradicts expectations, as observed in Mayora Indah, Garuda Food, and Nippon Indosari. Furthermore, fluctuations in DAR did not always correspond to changes in ROA, as seen in Garuda Food and Sariguna Primatirta.

Discrepancies are also evident in previous studies. (Sugiarti et al., 2022) concluded that WCT had a positive but insignificant impact on ROA, whereas (Meisaroh & Dewi, 2023) found a positive and significant effect. Similarly, (Firmansyah & Syarifudin, 2021) reported that FATO had a positive but insignificant effect on ROA, while Sinaga et al. (2021) observed a negative and insignificant impact. Considering these business phenomena and research inconsistencies, this study seeks to empirically analyze whether WCT, DAR, and FATO have a significant influence on ROA.

## METHODS

This study applies a quantitative approach to data analysis. In quantitative research, data analysis takes place once data from all participants or other relevant sources has been gathered (Reski, 2022). As noted by (Danford, 2023), the data analysis process includes activities such as categorizing and organizing data by variables, presenting data for each variable studied, performing calculations to address the research questions, and testing the proposed hypotheses. The analysis methods used in this study are descriptive and verification analyses. For the verification analysis, panel data regression (pooled data) is employed. The data processing tool utilized in this study is Eviews 10.

### Return on Asset (ROA)

According to (Sudianto, 2023), profitability ratios assess how efficiently a company's assets generate net profit. A higher Return on Assets (ROA) signifies better asset management and increased profitability, while a lower ROA indicates a reduced net profit derived from asset utilization. (Khofiyah et al., 2023) explains that ROA measures how effectively a company's assets contribute to generating net profit. In other words, it gauges the amount of net profit generated for each rupiah invested in total assets. This ratio is determined by dividing net profit by total assets. A higher ROA reflects greater net profit per rupiah of assets, while a lower ROA signifies less net profit from the same investment in assets.

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

### Working Capital Turnover (WCT)

(Siswanto & Maylani, 2022) states that Working Capital Turnover is a ratio used to evaluate the efficiency of a company's working capital over a specific period. It reflects the extent to which working capital is utilized or 'turned over' during that time. This ratio is calculated by comparing sales to working capital, or the average working

capital. The formula for calculating Working Capital Turnover is as follows:

$$\text{Working Capital Turnover} = \frac{\text{Net Sales}}{\text{Working Capital}}$$

This ratio measures the relationship between total sales and current assets and liabilities. When sales surpass these liabilities and assets, working capital turnover increases. On the other hand, a decrease in sales results in a lower working capital turnover, leading to reduced profits (Sinaga et al., 2021). A high working capital turnover indicates efficient use of capital, allowing for quicker cash recovery and greater profitability, while low turnover signals inefficiency. discovered that working capital turnover has a positive and significant impact on profitability (Mahardika & Suci, 2021).

#### **Debt to Asset Ratio (DAR)**

(Siswanto & Maylani, 2022) explains that the Debt to Asset Ratio (DAR) measures the proportion of total debt relative to total assets, showing how much of a company's assets are funded by debt. A higher DAR indicates greater reliance on debt, which can result in a lower Return on Assets (ROA) (Allen & Sack, 2021). A high DAR suggests that the company depends more on debt than equity, leading to increased financial strain due to interest and repayment obligations, which can negatively impact profitability. (Lestiyadi, 2023) classifies DAR as a leverage ratio, which helps assess a company's ability to meet external financial obligations while maintaining a balance between its fixed assets and capital.

$$\text{Debt to Asset Ratio} = \frac{\text{Total Debt}}{\text{Total Assets}} \times 100\%$$

#### **Fixed Assets Turnover (FATO)**

(Siswanto & Maylani, 2022) defines Fixed Asset Turnover as a ratio that measures how often the funds invested in fixed assets are utilized within a given period. In other words, it evaluates whether the company has fully maximized the use of its fixed asset capacity. This ratio is calculated by comparing net sales with fixed assets over a specific period.

$$\text{Fixed Assets Turnover} = \frac{\text{Sales}}{\text{Total Fixed Assets}}$$

This ratio indicates the effectiveness of fixed assets in generating revenue. A high turnover ratio suggests that fixed assets are being utilized efficiently, with a small amount of assets generating a significant amount of sales.

#### **Conceptual Framework**

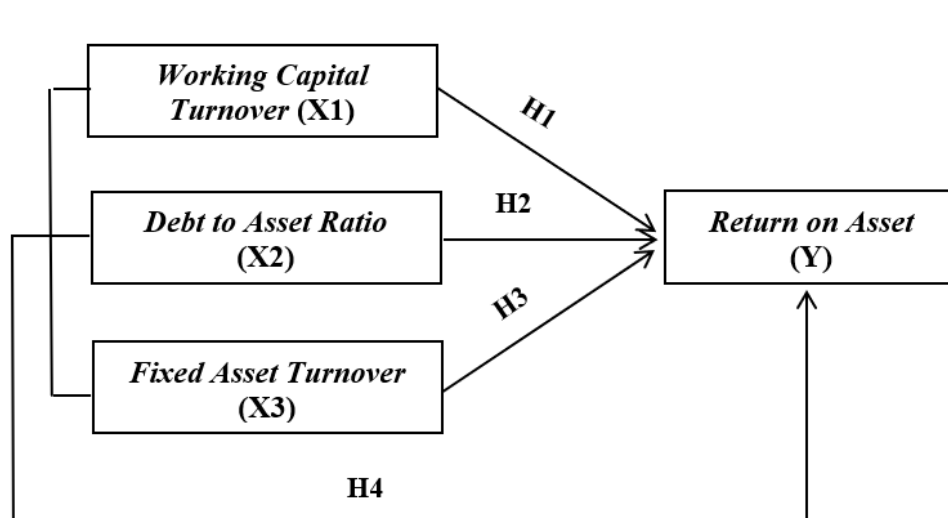
Working capital turnover assesses how effectively a company manages its current assets in relation to liabilities. A high turnover rate signals efficient asset management,

which leads to improved liquidity and profitability. Efficient working capital turnover is anticipated to have a positive impact on ROA by boosting operational efficiency and net profit.

At the same time, both the Debt to Asset Ratio (DAR) and Fixed Asset Turnover (FATO) also influence ROA. DAR indicates the proportion of assets funded by debt, with a higher ratio suggesting increased financial risk. If the costs of debt surpass the income generated from assets, ROA may decrease.

Conversely, Fixed Asset Turnover (FATO) evaluates how effectively a company utilizes its fixed assets. A higher turnover ratio suggests that assets are being used more efficiently, potentially leading to a higher ROA. In the food and beverages sector, where investments in fixed assets are typically substantial, optimizing the use of these assets can significantly enhance financial performance.

Based on the explanation above, the conceptual framework for this research is:



**Figure 1.** Conceptual Framework

### Rersearch Hypothesis

(Balaka, 2022) defines a hypothesis as a provisional answer whose validity is to be tested through research. According to (Danford, 2023), a hypothesis is a formal statement that outlines the expected relationship between an independent variable and a dependent variable. From the definitions provided by various experts, it can be concluded that a hypothesis contains several key elements: temporary assumptions, the relationship between variables, and a test for truth. Based on the previously stated issues, the following hypothesis is proposed:

1. Working Capital Turnover positively and significantly influences Return on Assets in food and beverage companies listed on the IDX during the 2019-2023 period.
2. Debt to Asset Ratio negatively and significantly affects Return on Assets in food and beverage companies listed on the IDX for the 2019-2023 period.
3. Fixed Asset Turnover positively and significantly impacts Return on Assets in food and beverage companies listed on the Indonesia Stock Exchange (BEI) for the 2019-2023 period.

4. Working Capital Turnover, Debt to Asset Ratio, and Fixed Asset Turnover collectively have a positive and significant impact on Return on Assets in companies listed on the Indonesia Stock Exchange (BEI) for the 2019-2023 period.

## RESULTS AND DISCUSSION

### Research Results

#### Descriptive Statistical Analysis

Descriptive statistical analysis offers insights into the data by presenting key information such as the mean, minimum and maximum values, standard deviation, and sample size of the variables involved.

**Table 2. Descriptive Analysis**

|                   | <b>WCT</b> | <b>DAR</b> | <b>FATO</b> | <b>ROA</b> |
|-------------------|------------|------------|-------------|------------|
| Mean              | 6.134524   | 0.150024   | 2.694524    | 0.099405   |
| Median            | 4.150000   | 0.140000   | 2.740000    | 0.090000   |
| Maximum           | 30.00000   | 0.393000   | 5.350000    | 0.260000   |
| Minimum           | 1.600000   | 0.001000   | 1.000000    | 0.000000   |
| Std. Deviation    | 5.877971   | 0.104935   | 1.178337    | 0.064354   |
| Skewness          | 2.569780   | 0.578737   | 0.267237    | 0.644070   |
| Kurtosis          | 9.575659   | 2.635468   | 2.006309    | 3.205128   |
| Jarque-Bera       | 121.8952   | 2.577099   | 2.227896    | 2.977415   |
| Probability       | 0.000000   | 0.275670   | 0.328260    | 0.225664   |
| Sum               | 257.650    | 6.301000   | 1.13170     | 4.175000   |
| Sum Sq. Deviation | 1.426      | 0.451469   | 5.6927640   | 0.169798   |
| Observations      | 42         | 42         | 42          | 42         |

Source: Data Processing Results with Eviews 10 Software

The findings from the descriptive analysis in Table 2 above can be explained as follows:

1. According to the calculations from the descriptive statistical analysis, the Working Capital Turnover (WCT) variable has a minimum value of 1,600 and a maximum value of 30,000, with an average of 6,134 and a standard deviation of 5,877. This indicates that the standard deviation is smaller than the mean, suggesting an even distribution of the data.
2. According to the descriptive statistical analysis calculations, the Debt to Asset Ratio (DAR) variable has a minimum value of 0.001000 and a maximum value of 0.393000, with an average of 0.150024 and a standard deviation of 0.104935. Since the standard deviation is smaller than the mean, this indicates an even distribution of the data.
3. Based on the descriptive statistical analysis calculations, the Fixed Asset Turnover (FATO) variable has a minimum value of 1.000000 and a maximum value of 5.350000, with an average of 2.694524 and a standard deviation of 1.178337. Since the standard deviation is smaller than the mean, this suggests an even distribution of the data.
4. According to the descriptive statistical analysis calculations, the Return on Assets (ROA) variable has a minimum value of 0.000000 and a maximum value of

0.260000, with an average of 0.099405 and a standard deviation of 0.064354. Since the standard deviation is smaller than the mean, it indicates an even distribution of the data.

## Quantitative Analysis

### Selection of Panel Data Regression Models

The initial step involves selecting the best model from the three options by conducting the Chow test, Hausman test, and Lagrange Multiplier test (Rahmawati & Khoiriawati, 2022).

#### Chow Test

This test was conducted to evaluate the common effect and fixed effect models, using the Eviews10 software.

**Table 3.** Chow Test Results

#### Redundant Fixed Effects Tests

Equation: Untitled

Test cross-section fixed effects

| Effects Test             | Statistic | d.f.   | Prob.  |
|--------------------------|-----------|--------|--------|
| Cross-section F          | 8.690458  | (8,30) | 0.0000 |
| Cross-section Chi-square | 50.366317 | 8      | 0.0000 |

Source: Data Processing Results with Eviews 10 Software

Output Analysis:

- Based on the results of the Chow Test, the probability value is 0.0000, which is less than 0.05, indicating that the Fixed Effect Model (FEM) should be selected. Therefore, the next step is to proceed with the Hausman Test.

#### Hausman Test

This test was performed to determine whether the data should be analyzed using fixed effects or random effects, and it was conducted using the Eviews10 software.

**Table 4.** Hausman Test Results

#### Correlated Random Effects - Hausman Test

Equation: Untitled

Test cross-section random effects

| Test Summary         | Chi-Sq. Statistic | Chi-Sq. d.f. | Prob.  |
|----------------------|-------------------|--------------|--------|
| Cross-section random | 3.097207          | 3            | 0.3769 |

Source: Data Processing Results with Eviews 10 Software

Output Analysis:

- According to the results of the Hausman Test, the probability value is 0.3769, which is greater than 0.05, indicating that the Random Effect Model (REM) should be selected. Therefore, the next step is to proceed with the Lagrange Multiplier Test (LM Test).

### Lagrange Multiplier Test

This test was conducted to determine whether the data should be analyzed using random effects or common effects, and it was performed using the Eviews10 software.

**Table 5.** Lagrange Multiplier Test Results

Lagrange multiplier (LM) test for panel data

Date: 01/05/25 Time: 17:01

Sample: 2019 2023

Total panel observations: 42

Probability in ()

| Null (no rand. effect)<br>Alternative | Cross-section<br>One-sided | Period<br>One-sided   | Both                 |
|---------------------------------------|----------------------------|-----------------------|----------------------|
| Breusch-Pagan                         | 10.20901<br>(0.0014)       | 1.887104<br>(0.1695)  | 12.09611<br>(0.0005) |
| Honda                                 | 3.195154<br>(0.0007)       | -1.373719<br>(0.9152) | 1.287949<br>(0.0989) |
| King-Wu                               | 3.195154<br>(0.0007)       | -1.373719<br>(0.9152) | 0.728179<br>(0.2333) |
| GHM                                   | --<br>--                   | --<br>--              | 10.20901<br>(0.0022) |

Source: Data Processing Results with Eviews 10 Software

### Output Analysis

Based on the results of the Lagrange Multiplier Test (LM Test), the probability value is 0.0014, which is less than 0.05, indicating that the Random Effect Model (REM) should be selected.

**Table 6.** Recapitulation of Selection Results of Panel Data Regression Model

| Test                              | Results     | Conclusion |
|-----------------------------------|-------------|------------|
| Chow Test                         | Prob > 0,05 | CEM        |
|                                   | Prob < 0,05 | FEM        |
| Hausman Test                      | Prob > 0,05 | REM        |
|                                   | Prob < 0,05 | FEM        |
| Uji Lagrange Multiplier (LM Test) | Prob > 0,05 | CEM        |
|                                   | Prob < 0,05 | REM        |

Source: Data Processing Results with Eviews 10 Software

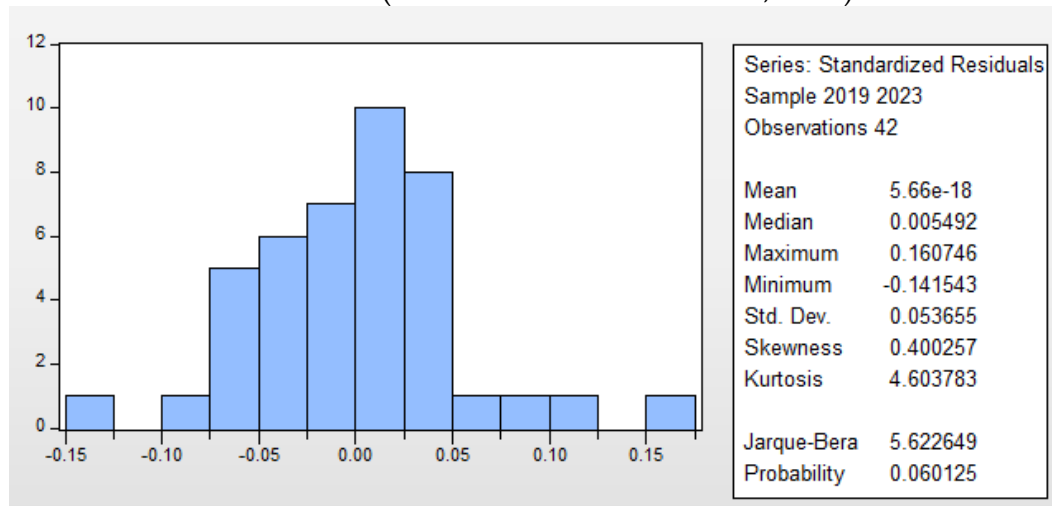
Notes:

Among the three tests conducted, the Random Effect Model (REM) was found to be the most suitable. Therefore, for the regression analysis, the Random Effect Model (REM) is chosen.

## Classical Assumption Test

### Normality Test

To assess whether the data follows a normal distribution, a normality test was conducted in the research (Rahmawati & Khoiriawati, 2022).



Source: Data Processing Results with Eviews 10 Software

**Figure 2.** Normality Test Result

As shown in Figure 2, the Jarque-Bera Probability Value is 0.060, which is greater than 0.05. Therefore, it can be concluded that the data is normally distributed, and the Data Normality Test has been satisfied.

### Multicollinearity Test

To determine if there is a strong correlation between the independent variables, a multicollinearity test was conducted on the regression model (Rahmawati & Khoiriawati, 2022).

**Table 7.** Multicollinearity Test Results

| Correlation |           |           |           |           |  |
|-------------|-----------|-----------|-----------|-----------|--|
|             | Y         | X1        | X2        | X3        |  |
| Y           | 1.000000  | 0.089695  | -0.492379 | -0.069429 |  |
| X1          | 0.089695  | 1.000000  | 0.193232  | -0.432675 |  |
| X2          | -0.492379 | 0.193232  | 1.000000  | 0.234934  |  |
| X3          | -0.069429 | -0.432675 | 0.234934  | 1.000000  |  |

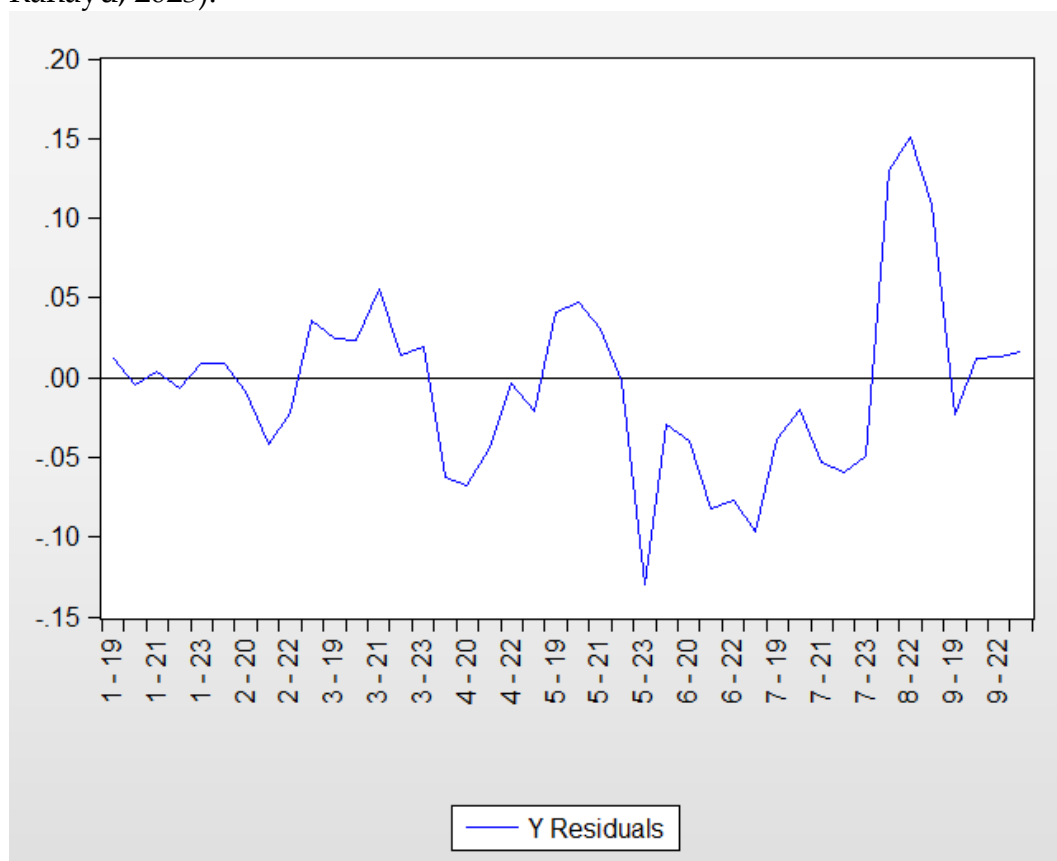
Source: Data Processing Results with Eviews 10 Software

The correlation coefficient between X1 and X2 is 0.193232, and the correlation coefficient between X1 and X3 is -0.432675, both of which are less than 0.85. Therefore,

it can be concluded that there is no multicollinearity, and the model passes the Multicollinearity Test.

### Heteroscedasticity Test

To detect any inequality in residuals and variance across different conditions in the regression model, a heteroscedasticity test was performed (Hani Rosanti & Yayuk Sri Rahayu, 2023).



Source: Data Processing Results with Eviews 10 Software

**Figure 2.** Heteroscedasticity Test Results

Based on the residual graph (blue), it can be observed that the values do not exceed the limits of 500 and -500, indicating that the residual variance is consistent. Therefore, there are no signs of heteroscedasticity, and the model passes the Heteroscedasticity Test.

**Table 8.** Analysis of Random Effect Model (REM) Output Panel Data Regression

Dependent Variable: Y  
Method: Panel EGLS (Cross-section random effects)  
Date: 01/05/25 Time: 17:37  
Sample: 2019 2023  
Periods included: 5  
Cross-sections included: 9  
Total panel (unbalanced) observations: 42  
Swamy and Arora estimator of component variances

| Variable              | Coefficient | Std. Error         | t-Statistic | Prob.    |
|-----------------------|-------------|--------------------|-------------|----------|
| C                     | 0.119281    | 0.030871           | 3.863858    | 0.0004   |
| X1                    | 1.39E-06    | 1.40E-06           | 0.987589    | 0.3296   |
| X2                    | -0.206174   | 0.081101           | -2.542195   | 0.0152   |
| X3                    | 2.96E-06    | 8.72E-06           | 0.339896    | 0.7358   |
| Effects Specification |             |                    |             |          |
|                       |             |                    | S.D.        | Rho      |
| Cross-section random  |             |                    | 0.049996    | 0.6782   |
| Idiosyncratic random  |             |                    | 0.034438    | 0.3218   |
| Weighted Statistics   |             |                    |             |          |
| R-squared             | 0.145966    | Mean dependent var |             | 0.030956 |
| Adjusted R-squared    | 0.078542    | S.D. dependent var |             | 0.037416 |
| S.E. of regression    | 0.035006    | Sum squared resid  |             | 0.046565 |
| F-statistic           | 2.164907    | Durbin-Watson stat |             | 0.976811 |
| Prob(F-statistic)     | 0.108121    |                    |             |          |

Source: Data Processing Results with Eviews 10 Software

Table 8 presents the results of the panel data regression analysis using the REM approach, as shown in the following equation:

$$\text{ROA} = 0.119281 + 1.386 \text{ X1} - 0.206 \text{ X2} + 2.964 \text{ X3}$$

- The constant value obtained is 0.119281, indicating that for each 1% increase in the independent variables (X1 = Working Capital Turnover (WCT), X2 = DAR, and X3 = FATO), the dependent variable (ROA) is expected to increase by 0.119281 or 11.9% on average.
- The regression coefficient for Variable X1 (Working Capital Turnover, WCT) is 1.386, meaning that for every 1% increase in WCT, the dependent variable (ROA) is expected to increase by 1.386 or 138.6%, assuming all other variables remain constant.
- The regression coefficient for Variable X2 (DAR) is -0.206, meaning that for every 1% increase in DAR, the dependent variable (ROA) is expected to decrease by 0.206 or 20.6%, assuming all other variables remain constant.
- The regression coefficient for Variable X3 (Fixed Asset Turnover, FATO) is 2.964, indicating that for every 1% increase in FATO, the dependent variable (ROA) is expected to rise by 2.964 or 296.4%, assuming all other variables remain constant.

## **Hypothesis Testing**

### **Partial Test (t-Test)**

- Variable X1 (Working Capital Turnover, WCT) has a t-statistic value of 0.988 with a significance level of 0.3296, which is greater than 0.05. Therefore, it can be concluded that WCT has a positive but insignificant effect on Return on Assets (ROA).
- Variable X2 (Debt to Asset Ratio, DAR) has a t-statistic value of -2.542 with a significance level of 0.0152, which is less than 0.05. Therefore, it can be concluded that DAR has a negative and significant effect on Return on Assets (ROA).
- Variable X3 (Fixed Asset Turnover, FATO) has a t-statistic value of 0.340 with a significance level of 0.7358, which is greater than 0.05. Therefore, it can be concluded that FATO has a positive but insignificant effect on Return on Assets (ROA).

### **Simultaneous Test (F-Test)**

The F-statistic value is 2.165 with a significance level of 0.108, which is greater than 0.05. Therefore, it can be concluded that the Working Capital Turnover (WCT), Debt to Asset Ratio (DAR), and Fixed Asset Turnover (FATO) variables do not have a significant simultaneous effect on Return on Assets (ROA).

### **Coefficient of Determination Test (R Square)**

The Adjusted R-Squared value is 0.0785, which indicates that the Working Capital Turnover (WCT), Debt to Asset Ratio (DAR), and Fixed Asset Turnover (FATO) variables collectively explain 7.9% of the variation in Return on Assets (ROA). The remaining 92.01% is influenced by factors not included in this study.

## **Discussion**

### **The Effect of Working Capital Turnover on Return on Assets (ROA)**

Based on the results of data analysis and hypothesis testing using Eviews-10, it can be concluded that Working Capital Turnover (WCT) has a positive but insignificant effect on Return on Assets (ROA). As a result, Hypothesis-1 (H1) is rejected.

This study reveals a unidirectional relationship between WCT and ROA, though the effect is not statistically significant. These findings do not align with the theory (Sudianto, 2023), suggesting that the company's working capital is not being utilized efficiently to support sales, profitability, or growth. The funds allocated for company operations and profit generation have yet to be optimized. Companies need to enhance their operational efficiency to sustain operations and increase profitability.

The findings of this study are consistent with (Sugiarti et al., 2022), who reported that WCT has a positive but insignificant effect on ROA among 31 F&B companies listed on the IDX (2019-2022). However, it contradicts (Meisaroh & Dewi, 2023), who found a positive and significant effect of WCT on ROA in property and real estate companies listed on the IDX during the same period.

### **The Effect of Debt to Asset Ratio on Return on Assets (ROA)**

Based on the data processing and hypothesis testing results using Eviews-10, it can be concluded that the Debt to Asset Ratio (DAR) has a negative and significant effect on Return on Assets (ROA). Therefore, Hypothesis-2 (H2) is accepted. A higher DAR indicates greater reliance on debt, leading to a lower ROA (Allen & Sack, 2021). The relationship between DAR and ROA is not unidirectional: as DAR increases, ROA tends to decrease.

This finding aligns with (Allen & Sack, 2021), who state that a higher Debt to Asset Ratio (DAR) reflects a stronger dependence on debt financing, which increases financial burdens from interest and installment payments, ultimately lowering ROA. This research is consistent with previous studies. (Amrulloh et al., 2022) found that DAR negatively and significantly affects ROA in property and real estate companies. Similarly, (Pangestika et al., 2021) reported a negative and significant impact of DAR on ROA in F&B companies listed on the IDX from 2014-2020. (Dewi, 2023) also confirmed this negative and significant relationship in consumer goods sector companies from 2013-2017.

### **The Effect of Fixed Asset Turnover on Return on Assets (ROA)**

Based on data processing and hypothesis testing using Eviews-10, Fixed Asset Turnover (FATO) has a positive but insignificant effect on Return on Assets (ROA), leading to the rejection of Hypothesis-3 (H3). This suggests that asset management is not yet efficient in generating income from fixed assets, and a high FATO does not necessarily result in higher net profit or an increased ROA.

These results do not entirely align with (Sudianto, 2023)ksmir, who asserted that a higher FATO should improve revenue generation. However, in this study, while an increase in FATO does positively influence ROA, the effect is not statistically significant.

### **The Effect of Working Capital Turnover, Debt to Asset Ratio, and Fixed Asset Turnover on Return on Assets (ROA)**

Based on the results of data processing and hypothesis testing using Eviews-10, it can be concluded that the Working Capital Turnover (WCT), Debt to Asset Ratio (DAR), and Fixed Asset Turnover (FATO) variables do not have a significant effect on Return on Assets (ROA) when considered together. As a result, Hypothesis-4 (H4) is rejected. This indicates that the company's operational activities, including its use of working capital turnover, reliance on debt to maximize assets and meet obligations as indicated by DAR, and its asset utilization in generating revenue and profit as reflected in FATO, do not significantly influence the profitability represented by ROA.

## **CONCLUSION**

Based on the research findings, the author draws several conclusions. First, Working Capital Turnover (WCT) has a positive but insignificant effect on Return on Assets (ROA) in food & beverage companies listed on the IDX for 2019-2023. Second, Debt to Asset Ratio (DAR) negatively and significantly affects ROA, showing that higher debt

reduces profitability. Third, Fixed Asset Turnover (FATO) also has a positive but insignificant effect on ROA. Lastly, the combined effect of WCT, DAR, and FATO does not significantly impact ROA in these companies. These results suggest that while individual factors may influence profitability, their overall effect on ROA is not significant.

### SUGGESTION

Based on the research findings, the author suggests that future studies could explore additional variables that may impact ROA. This could include incorporating more independent variables, extending the research period, or examining different sectors listed on the IDX to identify potential differences and achieve more accurate and comprehensive results.

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