
Rizky Syah Fitri Lubis¹, Feby Milanie², Suwarno³
¹,²,³ Program Studi Manajemen, Universitas Pembangunan Panca Budi, Indonesia
syahfitrylubis2@gmail.com, febymilanie@dosen.pancabudi.ac.id

Abstract

This research was conducted to determine how the effect of firm size, working capital turnover, and debt to equity ratio on return on assets in consumer goods manufacturing companies listed on the Indonesia Stock Exchange. Data taken from www.idx.co.id. The data used was from 2012 to 2020. The research was conducted in 2022. The population in this research was 56 companies with 33 companies used as samples. This research used quantitative data that is processed with the Eviews 9 application with the panel regression method. The test results concluded that the variable company size and debt to equity ratio partially had a significant effect on return on assets, while working capital turnover partially did not have a significant effect on return on assets. Simultaneously, firm size, working capital turnover, and debt to equity ratio also had a significant effect on the return on assets of manufacturing companies in the consumer goods sector. The contribution given by the variables of firm size, working capital turnover, and debt to equity ratio to return on assets was 87.07%, while the level of closeness of the variables of firm size, working capital turnover, and debt to equity ratio to return on assets was very close or very strong.

Keywords
company size; working capital turnover; debt to equity ratio; return on assets; manufacturing

I. Introduction

Manufacturing enterprises, particularly those in the consumer goods industry, are critical to the country's economy, as they supply a variety of food and beverage products consumed regularly (Sitorus, Hernandy, Triskietanto, & Angela, 2022). The primary objective of any business, particularly those in the food and beverage sector, is to maximize profits from the equity and loans used to fund various business programs. Profitability is a term that refers to the ability of a business to make money (Sary, Denita, Aprilda, & Cynthia, 2021).

Profitability may be projected using return on assets (ROA). It demonstrates how the company's performance is measured by using the total assets it owns to generate profits (Ramli & Yusnaini, 2022). The performance of consumer products sector firms listed on the Indonesia Stock Exchange varies considerably, with regular variations in the company's profitability (Dewi & Rahyuda, 2020). The following graph illustrates the evolution of profitability, or a company's ability to create profits as measured by the return on assets variable in consumer goods manufacturing companies listed on the Indonesia Stock Exchange from 2012 to 2020:

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The graph indicates that the return on assets of manufacturing companies in the consumer products industry continues to drop through 2020, despite occasional improvements in 2016 and 2019. However, the return on assets ratio is still lower than in 2012 and 2013. Because the return on assets is never negative. It indicates that manufacturing enterprises in the consumer products industry are still profitable and have not sustained losses on average. However, the profit-to-assets ratio has declined.

A company's size is a proxy for its size (Nurdiana, 2018). The larger the company's assets, the larger the company's size, and vice versa (Kinesti, Dewi, & Wijayanti, 2020). If a business has a large total asset base, it might be assumed that it has bright prospects and can generate substantial profits (Sukmayanti & Triaryati, 2019). The natural logarithm of the company's total assets is used to standardize the company's size, which varies significantly (Fransisca & Widjaja, 2019). This graph shows how the logarithm of total company assets changes over time for consumer products manufacturing companies that are on the Indonesia Stock Exchange. It shows how business size changes over time from 2012 to 2020:

The graph demonstrates that firm size has tended to expand from 2012 to 2020, with an average of 14.3439 in 2012 and 15.1948 in 2020. It demonstrates that between 2012 and 2020, manufacturing companies in the consumer products industry continued to grow, allowing them to raise their total assets, which in turn increased the company's size.

With sufficient working capital, a business can finance all of its operations to maximize its profit (Setyawan & Susilowaty, 2018). Sufficient working cash will benefit the business (Wahyuliza & Dewita, 2018). Working capital can be quantified using the working capital turnover ratio, which determines the efficiency with which working capital is utilized, specifically the ratio of sales to working capital (Parlina, 2017). The evolution of working capital, as defined by working capital turnover, in consumer products manufacturing companies listed on the Indonesian Stock Exchange between 2012 and 2020, is seen in the following graph:
Figure 3. Working Capital Turnover Graph

The graph demonstrates that the average working capital turnover ratio increased significantly from 2012 to 2015, reaching a peak of 61.86 in 2015. However, the working capital turnover ratio declined dramatically in 2016 and 2017 to 18.59. It remained constant in 2018 and 2019 but declined to 1.58 in 2020. It demonstrates that manufacturing firms in the consumer goods sector improved their efficiency in utilizing net working capital between 2012 and 2015. However, between 2016 and 2020, the efficiency of networking capital utilization continued to deteriorate.

A business requires assets to finance its manufacturing process and day-to-day operations (Chandra, Wijaya, & Hayati, 2020). These assets can be acquired by the owner’s capital deposit or through borrowing from third parties (liabilities) (Irawan & Manda, 2021). For public companies, the primary objective is to maintain growth to attract investors or third-party funding (Sukadana & Triaryati, 2018). Capital for a business might come from either its funds or through loans (Maria, Wiagustini, & Sedana, 2019). The debt-to-equity ratio can determine the capital structure's health, which indicates the company's ability to satisfy all of its commitments with its resources (Lorenza, Kadir, & Sjahruddin, 2020). The following graph illustrates the evolution of the capital structure, as measured by the debt-to-equity ratio, of consumer goods manufacturing companies listed on the Indonesian Stock Exchange from 2012 to 2020:

Figure 4. Debt-to-Equity Ratio Graph

The graph demonstrates that from 2012 to 2015, the debt to equity ratio fluctuated significantly. Because the debt to equity ratio was zigzagging, there was no stability in the capital structure of manufacturing enterprises in the consumer goods sector. Between 2016 and 2019, the average debt to equity ratio continued to drop slowly but steadily. By the end of 2020, the debt-to-equity ratio had slightly grown. It demonstrates that manufacturing enterprises in the consumer products sector’s reliance on debt to carry out business activities has begun to fall, particularly between 2016 and 2011.
II. Review of Literature

2.1 Profitability

According to Munawir (2018), profitability refers to a business's ability to earn profits over a specified period. Profitability is critical for the business because it is one of the criteria used to determine the health of the enterprise (Sitorus, Hernandy, Triskietanto, & Angela, 2022). Profitability of a business is a comparison of profit to the assets or capital that generates profit; in other words, profitability is the capacity of a business to generate profits over a specified period (Ramli & Ysnaini, 2022). Profitability can be quantified using return on assets, defined as asset turnover divided by net income earned. The following formula can be used to calculate the return on assets: (Alimunir, Ervyna, & Irman, 2022)

2.2 The Size of the Company

According to Riyanto (2018), its size is determined by its equity value, sales value, or asset value. The size of a business is a proxy for its size (Nurdiana, 2018). According to Riyanto (2018), larger organizations are more profitable than smaller ones because investors view huge enterprises as vital. Additionally, larger businesses have more assets that can be employed as capital to maximize the ability of the business to make profits (Sukadana & Triaryati, 2018). Thus, the larger a company's assets, the greater the profit it will earn because the assets are employed for operational operations with the goal of profit. Thus, the larger the company's size will improve its profitability (Sukmayanti & Triaryati, 2019). The following formula can be used to determine the size of a business: (2018, Nurdiana)

Sukadana & Triaryati (2018), Fransisca & Widjaja (2019), and Sukmayanti & Triaryati (2019) all demonstrate that firm size has a significant effect on return on assets in their separate research.

2.3 Working Capital

Irawan and Silangit (2018) define working capital as the funds required by a business to satisfy its daily operating expenses. Working capital turnover can be used to quantify working capital (Parlina, 2017). Working capital turnover is a ratio used to determine the success of working capital management, specifically the ratio of sales to working capital (Agustyawati, 2019). Sawir (2015) explains that having adequate working capital improves the business. With sufficient working capital, the business can finance all of its operations to maximize its profit (profit) (Wahyuliza & Dewita, 2018). The following formula can be used to calculate working capital turnover: Susilowaty & Setyawan, 2018

Agustyawati (2019), Lutfi, Simangunsong, & Nuryani (2020), and Parlina (2017) all demonstrate that working capital turnover has a considerable impact on return on assets in their respective research.

2.4 Capital Structure

Sawir (2015) states that the capital structure is a subset of the financial structure, with the capital structure consisting of the company's total long-term spending sources. The debt-to-equity ratio can be used to assess the capital structure's health (Lorenza, Kadir, & Sjahruddin, 2020). The debt-to-equity ratio measures a business's capacity to satisfy all of its commitments using just its capital (Chandra, Wijaya, & Hayati, 2020). According to Sawir (2015), a high debt-to-assets ratio shows that the corporation has a significant debt load. While high debt increases funding sources, which, when used well, increases
profitability, high debt also increases the risk (Irawan & Manda, 2021). As a result, the higher the debt-to-equity ratio, the more loan capital is utilized to generate profits for the business (Maria, Wiagustini, & Sedana, 2019). The debt-to-equity ratio is calculated using the following formula: (Sukadana & Triaryati, 2018)

\[ \text{Lorenza, Kadir, and Sjahruddin (2020), Maria, Wiagustini, and Sedana (2019), and Sukadana & Triaryati (2018) all demonstrate that debt to equity has a significant effect on return on assets in their separate research.} \]

Based on the theory and the outcomes of prior investigations, the following hypotheses were developed in this study:

- **H1:** In consumer goods sector companies registered on the Indonesia Stock Exchange, company size affects return on assets.
- **H2:** In consumer products sector companies listed on the Indonesia Stock Exchange, working capital turnover substantially affects return on assets.
- **H3:** In consumer goods sector companies registered on the Indonesia Stock Exchange, the debt-to-equity ratio substantially affects return on assets.
- **H4:** In the consumer goods sector, companies registered on the Indonesia Stock Exchange, firm size, working capital turnover, and debt-to-equity ratio all have a substantial effect on return on assets.

### III. Research Method

Three independent factors are used in this study: firm size (X1), working capital turnover (X2), and debt to equity ratio (X3), as well as a dependent variable, return on assets (ROA) (Y). The consumer products sector companies listed on the Indonesia Stock Exchange served as the research subject.

This study employs an associative research approach with panel data regression analysis to analyze quantitative data. The data source is IDX.co.id. The corporation's financial statements from 2012 to 2020 were utilized as the data source. This study's population comprises all consumer products sector companies listed on the Indonesia Stock Exchange in 2021, which totals 56 firms with 33 firms selected as samples. Purposive sampling was utilized to collect data.

The Eviews 9.0 application will process the research data. The Chow, Hausman, and Lagrange multiplier tests were used to select the most appropriate regression model. The following is the regression model equation that was used:

\[
\text{ROA(Y) = } \alpha_{it} + \beta_1\text{SIZE}_{it} + \beta_2\text{WCT}_{it} + \beta_3\text{DER}_{it} + \varepsilon_{it}
\]

Two tests were used: the t-test (partial) and the F test (simultaneous) (Milanie, 2016). Finally, a determination test was conducted to determine the independent variable's contribution to the dependent variable and the degree of similarity (Sidik, 2019).

### IV. Discussion

#### 4.1 Specifications for the Test Panel Data Regression Model

##### a. Chow Examination

The Chow test is used to assess if the Common Effect Modal (CEM) or Fixed Effect Model (FEM) is the more appropriate modal (Rusiadi, Subiantoro, & Hidayat, 2016). If Ho accepts the conclusion, choose the Common Effect Model (CEM); if H1 accepts the conclusion, use the Fixed Effect Model (FEM) (Wahyuliza & Dewita, 2018). The following table summarizes the outcomes of model testing using Chow Test data:
### Table 1. Results of the Chow Test

<table>
<thead>
<tr>
<th>Effects Test</th>
<th>Statistic</th>
<th>d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section F</td>
<td>53.621566</td>
<td>(32,261)</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

The Chi-Square Cross-section from the Chow test has a probability value of 0.0000. This score is significantly less than 0.05 or 5%, indicating that H0 is rejected and H1 is accepted statistically. Based on the Chow test, the most acceptable model for this study is Fixed Effect Modal (FEM).

### b. Hausman Examination

The Hausman test is used to assess whether the Fixed Effect Model (FEM) or the Random Effect Model (REM) is the more appropriate modal (Rusiadi, Subiantoro, & Hidayat, 2016). If the Hausman test indicates that Ho is accepted, then the Random Effect Model (REM) should be chosen; if the Hausman test indicates that H1 is accepted, then the Fixed Effect Model (FEM) should be chosen (Alimunir, Ervyna, & Irman, 2022). The following are the findings of model testing using the Hausman test on the data:

### Table 2. Results of the Hausman Test

<table>
<thead>
<tr>
<th>Test Summary</th>
<th>Chi-Sq. Statistic</th>
<th>Chi-Sq. d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section random</td>
<td>19.501050</td>
<td>3</td>
<td>0.0002</td>
</tr>
</tbody>
</table>

The Hausman test results have a probability of 0.0002. The test findings indicate that the probability value is much less than 0.05, implying H1 is accepted, and H0 is rejected statistically. As a result of the Hausman test, the Fixed Effect Model is the best appropriate model to apply in this investigation (FEM).

### c. Multiplier Test of Lagrange

The Lagrange Multiplier test is used to assess whether the Random Effect Model (REM) or the Common Effect Model (CEM) is the more appropriate modal (Rusiadi, Subiantoro, & Hidayat, 2016). If Ho accepts the conclusion, the proper model is the Common Effect Model (CEM); if H1 accepts the conclusion, the correct model is the Random Effect Model (REM) (Sitorus, Hernandy, Triskietanto, & Angela, 2022). The following table summarizes the findings of model testing using the Lagrange Multiplier test:

### Table 3. Results of the Lagrange Multiplier Test

<table>
<thead>
<tr>
<th>Cross-section</th>
<th>Test Hypothesis</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breusch-Pagan</td>
<td>262.6096</td>
<td>0.667497</td>
</tr>
<tr>
<td></td>
<td>(0.0000)</td>
<td>(0.04139)</td>
</tr>
</tbody>
</table>

The Lagrange Multiplier test findings have a probability value of 0.000. The test findings indicate a probability value much less than 0.05, indicating that H0 is rejected and
H1 is approved. As a result of the Lagrange Multiplier test, it is clear that the Random Effect Model is the most appropriate model for this study (REM).

Two of the three tests used indicate that the Fixed Effect Model (FEM) is the most appropriate, namely the Chow and Hausman tests. The Chow Test, Hausman Test, and Lagrange Multiplier Test indicate that the Fixed Effect Model (FEM) is suitable for panel data regression. In contrast, the Lagrange Multiplier Test indicates the most appropriate model. Because the most appropriate model for panel data regression is the Random Effect Model (REM), the regression model used in this study is the Fixed Effect Model (FEM).

4.2 Model of Linear Regression with Fixed Effects (FEM)

The following table summarizes the findings of panel regression using the FEM:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>10.890130</td>
<td>2.008351</td>
</tr>
<tr>
<td>UP (X1)</td>
<td>-0.519646</td>
<td>0.133448</td>
</tr>
<tr>
<td>WCT (X2)</td>
<td>0.053956</td>
<td>0.036082</td>
</tr>
<tr>
<td>DER (X3)</td>
<td>-0.347263</td>
<td>0.052980</td>
</tr>
</tbody>
</table>

According to the table above, the regression equation yields the following findings when panel data are processed using the Fixed Effect Model (FEM) approach: (Sidik, Efendi, & Suherman, 2019)

\[
\text{ROA (Y) = } \alpha_{it} + \beta_1 \text{UP}_{it} + \beta_2 \text{WCT}_{it} + \beta_3 \text{DER}_{it} + \epsilon_{it}
\]

\[
\text{ROA (Y) = 10.890130 - 0.519646UP}_{it} + 0.053956\text{WCT}_{it} - 0.347263\text{DER}_{it} + \epsilon_{it}
\]

The following equation for panel data regression can be understood as follows:

a. If everything in the independent variables is deemed zero, does not exist, or is not calculated, both Company Size (X1), Working Capital Turnover (X2), and Debt to Equity Ratio (X3), then the value Return on Assets (Y) already existing in the amount of 10.890130.

b. The regression coefficient for the Firm Size (X1) variable is -0.519646, suggesting that increasing the Firm Size by one unit decreases the Return on Assets (Y) by 0.519646 units. It demonstrates that the scale of a business has a detrimental effect on its return on assets. Thus, increasing the size of the business reduces the return on assets, whereas decreasing the size of the business increases the return on assets.

c. The regression coefficient of 0.053956 for the Working Capital Turnover (X2) variable indicates that for every unit rise in Working Capital Turnover, the Return on Assets (Y) increases by 0.053956 units. It demonstrates that working capital turnover improves return on assets. Thus, an increase in working capital turnover results in an increase in return on assets; conversely, a decrease in working capital turnover results in a fall in return on assets.

d. The regression coefficient for the Debt to Equity Ratio (X3) variable is -0.347263, suggesting that increasing the Debt to Equity Ratio by one unit decreases the Return on Assets (Y) by 0.347263 units. It demonstrates that a high debt-to-equity ratio has a detrimental influence on the rate of return on assets. As a result, as the debt-to-equity ratio increases, the return on assets decreases. On the other hand, lowering the debt-to-equity ratio increases the return on assets.
4.3 Hypothesis Examination

This study tested hypotheses using two tests to explore for partial and simultaneous effects (Aspan, Milanie, & Sari, 2016).

a. T-test (Partial)

The following table summarizes the results of the t-test conducted using the Eviews 9 application:

Table 5. Results of the T-Test (Partial Test)

<table>
<thead>
<tr>
<th>Variable</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>5.422424</td>
<td>0.0000</td>
</tr>
<tr>
<td>UP (X1)</td>
<td>-3.894006</td>
<td>0.0001</td>
</tr>
<tr>
<td>WCT (X2)</td>
<td>1.495382</td>
<td>0.1360</td>
</tr>
<tr>
<td>DER (X3)</td>
<td>-6.554571</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

The t-test (partial) results indicate that each independent variable, Company Size (X1) and Debt to Equity Ratio (X3), has a probability value of 0.05. It demonstrates that both the size of the company (X1) and the debt-to-equity ratio (X3) have a considerable effect on the return on assets (Y) (Milanie, Sari, & Saputra, 2020). It is also consistent with the fact that the independent variables Firm Size (X1) and Debt to Equity Ratio (X3) have values of \( t_{\text{table}} > t_{\text{count}} \). Where \( t_{\text{table}} \) is 1.968 in this study because to the fact that \( df = n \) (amount of data) - k (number of variables) = 297 (33 companies x 7 years) - 4 (number of independent and dependent variables) = 293 as shown in the table list t. It demonstrates that Company Size (X1) and Debt to Equity Ratio (X3) both have a significant effect on Return on Assets (Y), or that Ho and Ha are acceptable (Rusiadi, Subiantoro, & Hidayat, 2016).

Working Capital Turnover (X2) has a probability greater than 0.05 and a value of \( t_{\text{count}} < t_{\text{table}} \), such that it has no influence on Return on Assets (Y) or accepts Ho and rejects Ha. The t-test (partial) results also indicate that the variable with the greatest influence on Return on Assets (Y) is the Debt to Equity Ratio (X3), as it has the highest absolute value of \( t_{\text{count}} \) compared to the other variables, which is 6.554571, and the smallest significant value of 0.0000. (Rusiadi, Subiantoro, & Hidayat, 2016).

b. F-Test (Simultaneous)

The table below contains the results of the F test as processed by the Eviews 9 application:

Table 6. Results of the F Test (Simultaneous Test)

<table>
<thead>
<tr>
<th>Weighted Statistics</th>
<th>F-statistic</th>
<th>Durbin-Watson stat</th>
<th>1.950741</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-statistic</td>
<td>57.96431</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
<td>0.0000000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The F test (simultaneous) findings indicate that the probability value generated is 0.000000. This number is significantly less than 0.05, indicating that concurrently accepting Ha and rejecting Ho or Company Size (X1), Working Capital Turnover (X2), and Debt to Equity Ratio (X3) has a substantial effect on Return on Assets (Y) (Milanie, Sari, & Saputra, 2020). It is also consistent with the 57.96431 Fcount value obtained. Where Fcount is more than Ftable, which is 2.635 because of the values of \( df1 = k – 1 = 4 – 1 = 3 \) and \( df2 = n – k = 297 – 4 = 293 \) as seen in the list of table F. (Rusiadi, Subiantoro, & Hidayat, 2016).
4.4 Determination Examination

The following table contains the results of the determination test or the coefficient of determination:

<table>
<thead>
<tr>
<th>Table 7. Results of Determination Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>R-squared</strong></td>
</tr>
<tr>
<td><strong>Adjusted R-squared</strong></td>
</tr>
</tbody>
</table>

The modified R Square value produced from the determination test is 0.870728, referred to as the coefficient of determination; this implies that an 87.07 percent return on assets is possible and is explained by the company's size, working capital turnover, and debt to equity ratio. At the same time, the remaining 22.93 percent can be explained by non-model elements or variables such as company valuation, inflation, interest rates, and liquidity, among others (Rusiadi, Subiantoro, & Hidayat, 2016).

The R-value, generated by roots the R-square value using the MS program, demonstrates the relationship between business size, working capital turnover, debt-to-equity ratio, and return on assets. Excel by comprehending =SQRT(0.886014), resulting in an R-value of 0.941. R = 0.941 implies that the association between Company Size (X1), Working Capital Turnover (X2), and Debt to Equity Ratio (X3) and Return on Assets (Y) is extremely strong or very close. It is because the value of R is between 0.80 and 0.99. (Sugiyono, 2016).

4.5 Discussion

a. The Effect of Firm Size on Asset Returns

Given that tcount = -3.894006 and ttable = 1.968, the equation -table > tcount or -1.968 > -3.894006 holds true. With a significance value of t = 0.0001, the significance value is significantly less than 0.05. As a result, it may be stated that a company's size has a considerable effect on return on assets. According to the panel regression analysis results, the regression coefficient for company size is -0.519646, indicating that firm size has a negative effect on return on assets. Based on the results of the panel regression and t-tests, it can be inferred that business size has a somewhat negative and statistically significant effect on return on assets in consumer products manufacturing companies listed on the Indonesian Stock Exchange from 2012 to 2020. As a result, the proposed H1 hypothesis has been established as true and adopted.

The findings of this study corroborate those of Sukadana & Triaryati (2018), Fransisca & Widjaja (2019), and Sukmayanti & Triaryati (2019), all of which demonstrate a significant effect of firm size on return on assets.

b. Working Capital Turnover's Effect on Return on Assets

According to the t-test for the Working Capital Turnover (X2) variable, tcount = 1.495382 and ttable = 1.968, where tcount < ttable with sig. t = 0.1360, indicating a significance level larger than 0.05. As a result, it may be argued that working capital turnover has a negligible effect on Return on Assets (Y). According to the results of panel regression analysis, working capital turnover has a regression coefficient of 0.053956, indicating that it has a positive effect on return on assets. Based on the results of the panel regression and t tests, it can be inferred that working capital turnover has a somewhat positive but not statistically significant influence on return on assets in consumer products manufacturing companies listed on the Indonesian Stock Exchange between 2012 and 2020. As a result, the proposed H2 hypothesis is not valid and cannot be accepted.
The findings of this study contradict those of Agustyawati (2019), Lutfi, Simangunsong, and Nuryani (2020), and Parlina (2017), which all demonstrate that working capital turnover has a significant effect on return on assets.

c. The Debt-to-Equity Ratio's Effect on the Return on Assets

Given that tcount = -6.554571 and ttable = 1.968 are known from the t-test for the Debt to Equity Ratio (X1) variable, the equation is -ttable > tcount or -1.968 > -6.554571. With a significance value of sig. t = 0.0000, the significance value is significantly less than 0.05. As a result, it may be inferred that the debt-to-equity ratio has a marginal effect on Return on Assets (Y). The panel regression analysis results suggest that the debt to equity ratio has a regression value of -0.347263, indicating that it has a negative effect on return on assets. Based on the results of the panel regression and t tests, it can be inferred that the debt to equity ratio has a somewhat negative and statistically significant effect on return on assets in consumer goods manufacturing companies listed on the Indonesian Stock Exchange from 2012 to 2020. As a result, the proposed hypothesis H3 is confirmed to be valid and accepted.

The study's findings corroborate those of Lorenza, Kadir, and Sjahruddin (2020), Maria, Wiagustini, and Sedana (2019), and Sukadana & Triaryati (2018), all of which demonstrate that the debt-to-equity ratio has a significant effect on asset returns.

d. Return on Assets and the Effects of Company Size, Working Capital Turnover, and Debt-to-Equity Ratio

According to the F test, the regression model has an Fcount value of 57.96431 and a Ftable value of 2.635 = 0.05. As a result, Fcount > Ftable, with 0.000000 as the significant probability value. This value is significantly less than 0.05. It may be established that the size of the firm, its working capital turnover, and its debt-to-equity ratio all have a major effect on return on assets. The panel regression analysis and the F test demonstrate that working capital turnover has a positive effect. In contrast, firm size and debt to equity ratio have a negative and significant effect, implying that firm size, working capital turnover, and debt to equity ratio all have a negative effect simultaneously, to generate a profit on assets.

The panel regression and F tests indicate that firm size, working capital turnover, and debt-to-equity ratio have a negative and significant effect on return on assets in consumer products manufacturing companies listed on the Indonesian Stock Exchange between 2012 and 2020. As a result, hypothesis H4 has been established to be valid and adopted.

V. Conclusion

Firm size and debt-to-equity ratio have a considerable negative effect on return on assets in consumer goods manufacturing firms listed on the Indonesia Stock Exchange. In consumer products manufacturing companies listed on the Indonesia Stock Exchange, working capital turnover has a negligible effect on return on assets. The size of the firm, its working capital turnover, and its debt-to-equity ratio all have a substantial impact on the return on assets of consumer products manufacturing companies listed on the Indonesia Stock Exchange. The debt-to-equity ratio becomes the most influential factor affecting return on assets. It is recommended that manufacturing companies in the consumer goods sector maintain a cash position equal to no more than 200 percent of total short-term liabilities, expand company activities through various company investment schemes to increase profits, and reduce the company's reliance on debt to conduct business. Multiple sources of money to support the business's operations.
References


