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THE INFLUENCE OF RETURN ON ASSETS, QUICK RATIO, FIRM SIZE, AND ASSET STRUCTURE ON CAPITAL STRUCTURE: AN EMPIRICAL STUDY OF RETAIL SUB-SECTOR COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE IN 2020–2024

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Abstract: This study examines the effect of return on assets, quick ratio, firm size, and asset structure on capital structure in retail sub-sector companies listed on the Indonesia Stock Exchange. Using panel data regression analysis, the findings indicate that return on assets has a positive and significant influence on capital structure, suggesting that higher profitability enhances the firm's ability to optimize its financial structure. The quick ratio shows a negative and significant impact, reflecting that higher liquidity reduces the need for external debt. Firm size also contributes positively, implying that larger firms have broader access to funding sources. Meanwhile, asset structure demonstrates no significant relationship with capital structure, highlighting that retail companies are less dependent on fixed assets in financing decisions. These results offer insights for managers and investors in understanding the financial behavior of retail firms during the transition toward digital business environments.

Keywords: Return On Assets, Quick Ratio, Firm Size, Asset Structure, Capital Structure

INTRODUCTION

In today's era of globalization, businesses are required to adapt by effectively managing key structural components within their organizations. This is essential for gaining a competitive edge in an increasingly dynamic market environment. Economic development plays a vital role in supporting the continuity of business activities, particularly in the retail sector, which has experienced a resurgence in consumer purchasing power during the post-pandemic recovery phase (Brigham & Houston, 2019). The retail industry in Indonesia, especially those focusing on household needs and lifestyle products, such as PT Ace Hardware Tbk (ACES), is characterized by intense competition and high capital requirements.

In the context of digital business expansion, such as ACES's investment through PT Omni Digitama Internusa (ODI), a robust capital structure becomes a key supporting factor. The equity injection into ODI, without altering ownership proportions, illustrates the firm's preference for equity financing over additional debt, which aligns with the principles of financial prudence (Kasmir, 2019). This strategy strengthens the subsidiary's financial position while maintaining a stable debt-to-equity ratio (DER) at the parent company level. With strong cash reserves, ACES is capable of pursuing aggressive digital expansion while remaining within a sound capital structure framework, a critical approach for sustaining long-term competitiveness in the increasingly digitized modern retail landscape (Hery, 2019).

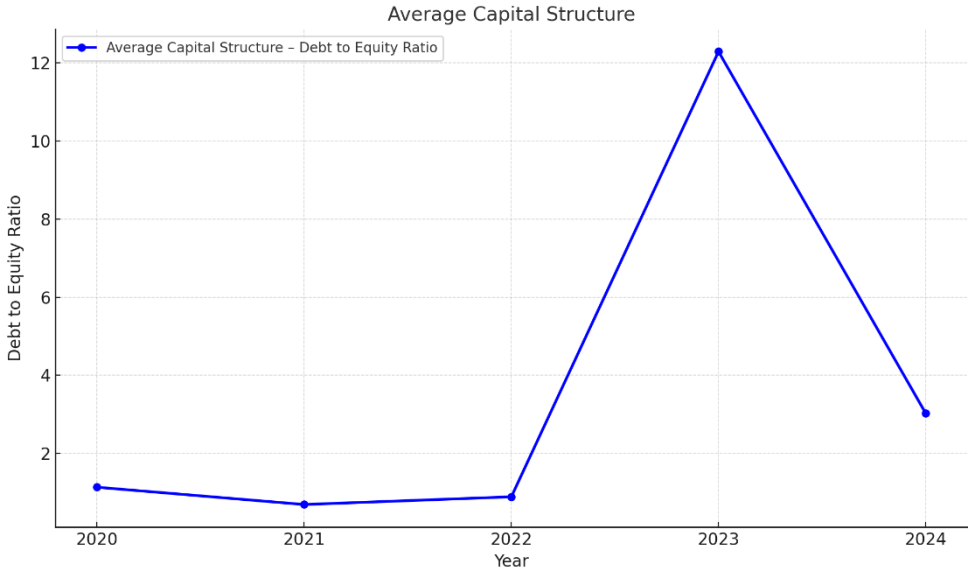


Figure 1. Average Capital Structure Chart

Based on Figure 1, the average capital structure chart illustrates significant fluctuations in the capital structure of retail sub-sector companies listed on the Indonesia Stock Exchange during the period from twenty twenty to twenty twenty-four. A relatively stable trend is observed from twenty twenty to twenty twenty-two, followed by a sharp spike in twenty twenty-three. In twenty twenty-two, the average capital structure stood at less than one, but it rose drastically the following year before declining again in twenty twenty-four. This surge likely reflects a shift in financing strategies, possibly due to increased use of debt for business expansion, working capital enhancement, or adjustments to the post-pandemic economic environment.

The first factor affecting capital structure is return on assets (ROA). According to Destianti, Mulyani, and Puspita (2024), ROA has a positive and significant effect on capital structure because it reflects a company's efficiency in generating profits from its assets.

The second factor is the quick ratio. As stated by Nainggolan, Butarbutar, and Putra (2023), the quick ratio positively and significantly influences capital structure since it indicates a firm’s ability to meet short-term obligations without relying on inventory. A high quick ratio signals strong liquidity, which in turn enhances investor and creditor confidence.

The third factor is firm size. Anisa, Pratiwi, and Dewi (2023) found that larger companies tend to have better access to capital markets and external funding sources, which positively and significantly affects their capital structure.

The fourth factor is asset structure. However, research by Aritonang, Sitompul, and Siregar (2024) suggests that asset structure does not significantly affect capital structure, as financing decisions in the retail sector are no longer entirely dependent on tangible assets as collateral, despite the presence of substantial fixed assets.

RESEARCH METHOD

This study adopts a quantitative approach using explanatory research to investigate the effect of return on assets, quick ratio, firm size, and asset structure on capital structure. The choice of this method is based on the objective to explain the causal relationship between the independent variables and the dependent variable within a measurable and structured framework. The focus is to test hypotheses using statistical tools and empirical data, allowing generalizable conclusions to be drawn from the findings.

The population in this study consists of all retail sub-sector companies listed on the Indonesia Stock Exchange over a five-year period. The selection of this sector is based on its dynamic nature, rapid digital transformation, and capital-intensive characteristics. The sampling technique used is purposive sampling, which involves selecting companies that meet specific criteria, such as publishing complete financial statements from the designated years and having consistent data on all required variables.

Secondary data are employed in this research, sourced directly from official financial reports published by the Indonesia Stock Exchange and company websites. The data collected include annual figures on return on assets, quick ratio, total assets, fixed assets, and total equity and liabilities. These figures are processed to generate the variables of interest, aligned with the study's theoretical framework.

The dependent variable in this study is capital structure, which is measured using the debt-to-equity ratio (DER), as suggested by Kasmir (2019). Return on assets (ROA) serves as a proxy for profitability, calculated based on Hery's (2019) formulation. The quick ratio represents liquidity, while firm size is measured using the natural logarithm of total assets, following the approach of Brigham and Houston (2019). Asset structure is operationalized as the ratio of fixed assets to total assets.

The data analysis technique used is panel data regression, selected for its ability to accommodate variations across time and entities simultaneously. This method provides more robust and efficient estimates by controlling for heterogeneity among companies. The analysis was conducted using EViews version 12, supported by Microsoft Excel for initial data cleaning and preparation.

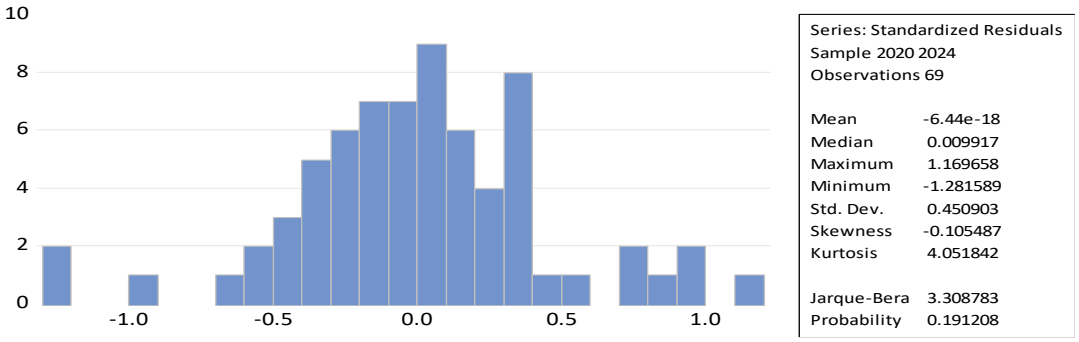
Prior to regression analysis, classical assumption tests were conducted to ensure the validity of the model. These included normality testing to confirm the distribution of residuals, multicollinearity testing to detect inter-variable correlation, heteroskedasticity testing to assess the variance of residuals, and autocorrelation testing to evaluate serial dependencies. The results indicated that the data met the assumptions required for panel regression.

In testing the hypotheses, both the F-test and t-test were applied. The F-test assesses the overall significance of the model, while the t-test evaluates the individual impact of each independent variable on capital structure. The significance threshold was set at five percent to determine statistical relevance, a standard practice in financial research.

RESULTS AND DISCUSSION

Classical Assumption Testing

Figure 2. Classical Assumption Testing Results



The classical assumption tests used in this study include the normality test, multicollinearity test, autocorrelation test, and heteroscedasticity test.

Normality Test

Based on the figure above, the probability value is shown to be zero point one nine one two zero eight. This value is greater than the significance level of zero point zero five. Therefore, it can be concluded that the residuals in this regression model are normally distributed.

Multicollinearity Test

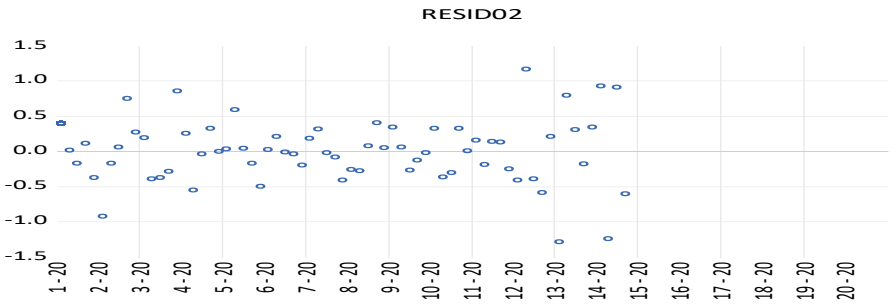
Table 1. Multicollinearity Test Results

	DER	ROA	QR	UP	SA
DER	1.000000	0.12552664	-0,7673867	0.19908238	0.22820076
ROA	0.12552664	1.000000	-0.1697330	0.17680484	-0.1402822
QR	-0.7673867	-0.1697330	1.000000	-0.0671131	-0.2988734

UP	0.19908238	0.17680484	-0.0671131	1.000000	0.19903310
SA	0.22820076	-0.1402822	-0.2988734	0.19903310	1.000000

Based on the table above, the correlation coefficients among all independent variables are below zero point eight. This indicates that the regression model is free from multicollinearity issues, as there is no strong correlation among the independent variables.

Figure 3. Resido 2



The scatterplot above presents the results of the heteroscedasticity test. The residuals are dispersed randomly without forming any specific pattern or trend. This random distribution indicates that the variance of the residuals is constant across observations, suggesting that the regression model is free from heteroscedasticity issues. Therefore, the assumption of homoscedasticity is met, which supports the validity of the regression estimates.

Heteroscedasticity Test

The scatterplot shows that the data points are randomly dispersed and do not form any specific pattern. This indicates that the model is free from heteroscedasticity problems.

Autocorrelation Test

Table 2. Autocorrelation Test Results

R-squared	0.796150	*Mean dependent var*	-0.295861
Adjusted R-squared	0.705069	*S.D. dependent var*	0.998683
S.E. of regression	0.542361	*Sum squared resid*	13.82530
Log likelihood	-42.44435	*Durbin-Watson stat*	2.095659
F-statistic	8.741050		
Prob(F-statistic)	0.0000000		

Based on the table above, the Durbin-Watson statistic value is 2.095659. Since this value falls within the acceptable range of 1.54 to 2.46, it can be concluded that the regression model does not exhibit autocorrelation.

Panel Data Regression Analysis

Table 3. Panel Data Regression Analysis Results

Dependent Variable: Struktur_Modal
Method: Panel Least Squares
Date: 06/06/25 Time: 16:20
Sample: 2020 2024
Periods included: 5
Cross-sections included: 14
Total panel (unbalanced) observations: 69

Variable	*Coefficient*	*Std. Error*	*t-Statistic*	*Prob.*

C	-3.793294	1.515610	-2.502816	0.0159
Return On Assets	0.189415	0.077306	2.450208	0.0181
Quik Ratio	-0.629951	0.093859	-6.711666	0.0000
Firm Size	0.155403	0.048534	3.201979	0.0024
Asset Structure	0.235410	0.403922	0.582810	0.5628

Based on the panel regression equation, the interpretation of each independent variable's effect on the dependent variable (capital structure) is as follows:

a. The constant value is negative at -3.7932, meaning that if all independent variables (Return on Assets, Quick Ratio, Firm Size, and Asset Structure) are zero, the capital structure would be at that baseline level.
b. The regression coefficient for Return on Assets is 0.1894, indicating that, holding other variables constant, an increase in ROA leads to an increase in capital structure.
c. The regression coefficient for Quick Ratio is -0.6299, meaning that an increase in Quick Ratio results in a decrease in capital structure, assuming other variables remain unchanged.
d. The coefficient for Firm Size is 0.1554, showing that larger firm size positively contributes to a higher capital structure level.
e. The coefficient for Asset Structure is 0.2354, suggesting that an increase in asset structure leads to a decrease in capital structure, although the relationship may not be statistically significant.

Hypothesis Testing

Table 4. Hypothesis Testing Results

R-squared	0.796150	*Mean dependent var*	-0.295861
Adjusted R-squared	0.705069	*S.D. dependent var*	0.998683
S.E. of regression	0.542361	*Sum squared resid*	13.82530
Log likelihood	-42.44435	*Durbin-Watson stat*	2.095659
F-statistic	8.741050		
Prob(F-statistic)	0.0000000		

Based on the table above, the calculated F-value is 8.741050 with a significance level of 0.000000. Since the F-value is greater than the F-table value and the p-value is below the significance threshold of 0.05, it can be concluded that Return on Assets, Quick Ratio, Firm Size, and Asset Structure collectively have a significant effect on Capital Structure. Thus, the regression model is considered statistically valid for explaining variations in capital structure.

t-Test

Table 5. t-Test Results

Dependent Variable: Capital Structure
Method: Panel Least Squares
Date: 06/03/25 Time: 16:20
Sample: 2020 2024
Periods included: 5
Cross-sections included: 14
Total panel (unbalanced) observations: 69

Variable	*Coefficient*	*Std. Error*	*t-Statistic*	*Prob.*
C	-3.793294	1.515610	-2.502816	0.0159
Return On Assets	0.189415	0.077306	2.450208	0.0181
Quik Rasio	-0.629951	0.093859	-6.711666	0.0000
Firm Size	0.155403	0.048534	3.201979	0.0024
Asset Structure	0.235410	0.403922	0.582810	0.5628

Based on Table 5, the analysis of each independent variable is summarized as follows:

a. Return on Assets (ROA) shows a positive and significant effect on capital structure, as indicated by a p-value below the significance threshold. Thus, H_0 is rejected, and H_1 is accepted.
b. Quick Ratio has a negative and significant effect on capital structure. With a p-value far below the threshold, this indicates that companies with higher liquidity tend to rely less on debt. Therefore, H_0 is rejected, and H_2 is accepted.
c. Firm Size positively and significantly affects capital structure, suggesting that larger companies with stable cash flows and greater credit access tend to have higher leverage. Thus, H_0 is rejected, and H_3 is accepted.
d. Asset Structure does not significantly influence capital structure. The high p-value indicates that asset composition does not determine debt use in the retail sector. Therefore, H_0 is accepted, and H_4 is rejected.

Interpretation of Research Results

a. ROA significantly influences capital structure. Firms with higher ROA efficiently generate internal profits, reducing dependence on external debt and maintaining a healthy debt-to-equity ratio (DER). This finding aligns with Sutawan et al. (2025) but contrasts with Destianti et al. (2024), who found no significant effect.
b. Quick Ratio negatively and significantly affects capital structure. High liquidity reduces reliance on debt financing, especially in fast-moving retail environments. This contradicts findings by Nainggolan et al. (2023) and Srijono et al. (2023), who reported a positive or non-significant effect.
c. Firm Size has a positive and significant effect on capital structure. Larger firms benefit from greater financial credibility and access to external funding, making it easier to optimize capital structure. This supports the findings of Anisa et al. (2023) but differs from Adinata and Naryoto (2024), who found no significant effect.
d. Asset Structure does not significantly affect capital structure. In retail, the proportion of fixed assets is relatively low, and digital transformation has reduced reliance on physical assets. This result is consistent with Aritonang et al. (2024) but contrasts with Agustiani and Astawinetu (2024), who found a positive and significant effect.

CONCLUSION

This study investigates the influence of return on assets, quick ratio, firm size, and asset structure on capital structure in retail sub-sector companies listed on the Indonesia Stock Exchange. The results confirm that return on assets has a positive and significant effect, indicating that higher profitability supports internal funding and reduces dependency on external debt. Quick ratio shows a negative and significant impact, suggesting that firms with better liquidity are less reliant on debt financing. Firm size also positively influences capital structure, as larger firms generally have more access to credit and greater financial flexibility. On the other hand, asset structure does not exhibit a significant effect, implying that tangible asset composition is less relevant in the financing decisions of modern retail companies. This may be attributed to the shift toward digital business models, where physical assets are no longer primary drivers of capital structure. The findings of this research provide important insights for company management, investors, and policy makers in understanding financial strategy under competitive and rapidly changing market conditions. It also emphasizes the importance of internal performance indicators and corporate scale in determining the optimal capital structure, especially in industries undergoing digital transformation and facing evolving economic challenges.

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