

# Capital Structure Effect On Net Working Capital And Asset Management To Profitability

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**Abstract:** Competition in the industrial sector is increasing as more companies are established. This is a sign of the development of the Indonesian economy. Companies face various competitions, compete for their performance, and aim to achieve goals and growth. The profitability of a company can be influenced by many factors such as asset management, capital structure, and company size. Companies that know how to manage assets well can achieve maximum profit. In carrying out its operations, the company's assets are used to generate profits. The capital structure can affect profitability because the capital structure decision is one of the very important financial strategies that the Company must face. Therefore, in addition to affecting the profitability of the company, financial problems caused by the capital structure have a significant impact on macroeconomic outcomes.

**Keywords:** Asset Management; Capital Structure; Profitability; Net Working Capital.

**Abstrak:** Persaingan di sektor industri semakin meningkat dengan semakin banyaknya perusahaan yang berdiri. Hal ini merupakan tanda dari perkembangan perekonomian Indonesia. Perusahaan menghadapi berbagai persaingan, bersaing untuk meningkatkan kinerjanya, dan bertujuan untuk mencapai tujuan dan pertumbuhan. Profitabilitas suatu perusahaan dapat dipengaruhi oleh banyak faktor seperti manajemen aset, struktur modal, dan ukuran perusahaan. Perusahaan yang mengetahui cara mengelola aset dengan baik dapat mencapai laba yang maksimal. Dalam menjalankan operasinya, aset perusahaan digunakan untuk menghasilkan laba. Struktur modal dapat mempengaruhi profitabilitas karena keputusan struktur modal merupakan salah satu strategi keuangan yang sangat penting yang harus dihadapi oleh perusahaan. Oleh karena itu, selain mempengaruhi profitabilitas perusahaan, masalah keuangan yang disebabkan oleh struktur modal memiliki dampak yang signifikan terhadap hasil ekonomi makro.

**Kata Kunci:** Manajemen Aset; Struktur Modal; Profitabilitas; Modal Kerja Bersih.

## INTRODUCTION

Competition in the industrial sector is increasing as more and more companies are founded. This is a sign of the development of the Indonesian economy. Companies face various competitions, compete for their performance, and aim to achieve goals and growth (Lanjas et al., 2021).

The profitability of a company can be influenced by many factors such as asset management, capital structure, and company size. Companies that know how to manage assets well can achieve maximum profits. In carrying out its operations, company assets are used to generate company profits. Capital structure can affect profitability because capital structure decisions are one of the most important financial strategies that must be faced by the Company (Kotey R., 2023). Therefore, in addition to affecting a company's profitability,



financial problems caused by capital structure have a significant impact on macroeconomic results (Ria, 2023).

The term company size refers to a quantity expressed in certain units to measure the scale of a business, such as total assets, total sales, market capitalization, total revenue, and total sales. In this research, company size is measured by transforming the total assets owned by the company. Good management of company assets will be a source of profitability for a company. The better the management of company assets, the higher the level of profitability of a company. Asset management in this research is proxied by the fixed assets turnover ratio (FATO). This ratio is calculated by comparing net sales with the total fixed assets owned by the Company (Priskila & Dewi, 2023).

This assessment identifies profitability through current stock conditions by taking into account the influence of the relationship between company size, capital structure, and asset management which is moderated by share price volatility and liquidity with a focus on companies in the food and beverage industry sector listed on the Indonesia Stock Exchange.

The next factor that can affect profitability is the capital structure. A company's capital structure is the financial structure of how a company funds its operations, both from external and internal funds. According to pecking order theory, the use of external funds in the form of debt is more desirable than using capital. When managing the capital structure, the company must be able to combine its capital and profitable debt. Previous research reveals that the variable capital structure i.e., debt to equity has a negative and significant relationship with financial performance (Atta et al., 2020); (Wassie, 2020); (Dao and Ta, 2020).

## **THEORETICAL REVIEW**

**Capital Structure.** Determining a company's capital structure describes the trade-off between risk and rate of return. Thus, determining the capital structure is to find a balance between the level of risk and the level of return, which ultimately maximizes the share price. Although debt and equity levels may vary over time, most companies strive to keep the financing mix of their activities close to the target capital structure limits. In this research, capital structure is seen through the Debt-to-Equity Ratio (DER) which is usually used to assess the extent to which a company can fulfill its short-term and long-term obligations. Meanwhile, DER is a ratio used to estimate how much a company relies on debt to carry out its business activities (Nguyen, 2023).

**Net Working Capital.** Net Working Capital is a current asset that can be used to finance the company's operational activities without disrupting the company's liquidity. Sufficient working capital is very important for the long-term survival of the company, in the absence of capital labor, the company's operational activities will have an impact on the company's profitability. Apart from that, with adequate working capital, the company can operate economically and efficiently so that the company can obtain high profitability. The working capital writing is classified into a few primary categories as takes after. The primary category incorporates the deciding components of each component of working capital and the affect of those components on the execution and value of the company. (Karimi Maryam et al., 2023), stated that net working capital has a positive and significant effect on profitability.

Working capital management is an important aspect of a company's financial affairs, which has a direct and positive effect on profitability. An optimal level of profitability of a profitable business can guarantee proper cash flow management. Companies must optimize





their profitability while carrying out daily operations. Net Working Capital management includes balancing the proportion of working capital components, such as accounts receivable, inventory, and accounts payable, and efficiently using cash for daily business operations (Nguyen, 2023).

**Asset Management.** (Priscila, 2023) in asset management states that company wealth is a form of investment, where of course the company expects a return for this investment in the form of profits for the company. The better the management of company assets, the higher the level of profitability of a company. Management of company assets is an important aspect, asset management aims to ensure sustainable capacity development of the Company. Companies are required to be able to develop or optimize asset utilization to increase the Company's profitability. Companies must understand what must be done to optimize the assets they own to increase the company's profitability.

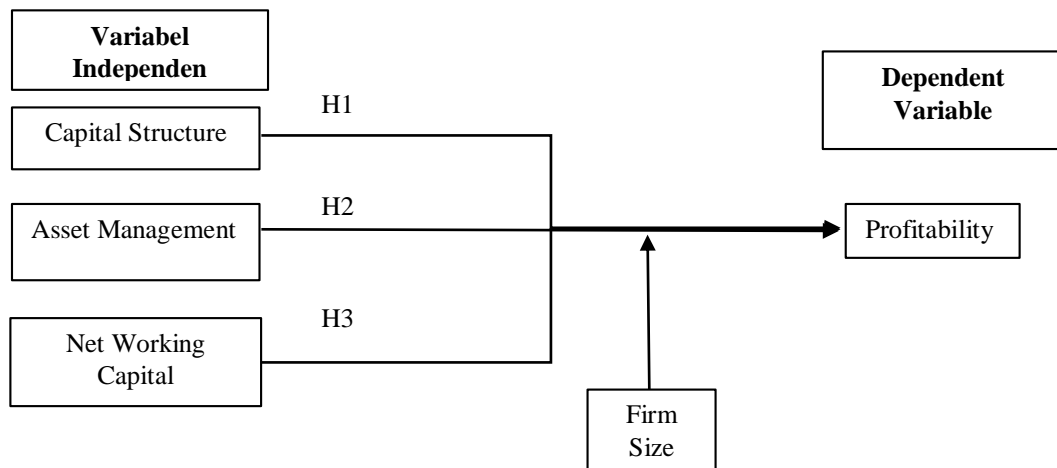
**Firm size.** Firm size is a comparison of the size or size of a company, where this is expressed through total assets if the company has a large number of assets (Balqis, Safri 2023). Company size is one of the variables that can determine company value, where company size can explain the total amount of assets owned by the company (Kartika Dewi & Abundanti, 2019). The size of the assets and capital used by a company is a reflection of the size of the company itself.

The larger the size of a company, the greater the assets owned by the company, so the company's profitability will decrease due to the costs of adding these assets. Company size in this study is proxied by the size ratio (SIZE) which is calculated by the natural logarithm of the total assets owned by the company (Balqis, Safri 2023).

**Profitability.** The level of profit of a company in a certain period at a certain level of sales, assets, costs, and share capital is defined as profitability. The income and asset or capital levels to be compared can be used to determine profitability. In this case, companies that can maintain profitability and business stability can provide positive insight to investors regarding their value, thereby encouraging share prices to increase (Djashan & Agustinus, 2020).

Measuring the level of profitability can use several financial methods or ratios: (1) Operating Margin, (2) Profit Margin, (3) Return on Total Assets (ROA), (4) Basic Earning Power (BEP) Ratio, and (5) Return General Equity (ROE). In this research, profitability is calculated through ROE. This ratio measures a company's financial performance by comparing net profit with shareholder equity. ROE can also describe how effectively the use of own capital is. From an investor's perspective, this ratio is used to determine whether an investment in a company will produce the expected return (Tandelilin, 2017).





**Figure 1.** Research Model

**Thinking Framework.** Profitability shows the effectiveness of a company's operational and investment decisions, while profitability ratios assess how well a company uses resources to maximize revenue (Taha et al., 2023). One of the many problems in a company is Capital Structure, which is defined as determining the share of capital related to the ratio between loans and equity which results in the company's funding policy. Managing the capital structure well will have an impact on increasing shareholder welfare, so that investors will consider investing capital in the company (Almahadin & Oroud, 2020).

This research also found a relationship related to the use of Liquidity and Stock Price Volatility variables. Viewed from the stock market side, stock market prices fluctuate sharply up and down due to a series of global financial impacts, which have an impact on investors' decisions to buy or sell shares. In contrast, stock liquidity is based on the company's profits when the stock price rises (Taha et al., 2023).

**Hypothesis Development. Capital Structure and Profitability.** Based on the Pecking Order theory, companies with a high level of profitability will have significant internal funding strength. So we will use internal funds first to finance investments so that debt levels can be reduced, which will then minimize the risk of failure to fulfill obligations, interest expenses, and bankruptcy conditions.

Profitability is used to reduce debt because it can be seen that the results of the analysis have a negative and significant effect, which means that the results of the company's profit level are used to reduce the debt ratio. The results of this research support the results of research conducted by (Zuhroh, 2019) and (Siddik & Chabachib, 2017), which states that capital structure has a negative and significant effect on profitability.

Therefore, this study proposes the following hypothesis:

**H1:** Capital structure has a positive influence on the profitability of food and beverage industry companies listed on the Indonesian Stock Exchange.

**Net Working Capital and Profitability.** According to (Nguyen, 2023), Net Working Capital (NWC) is an important component that influences the profitability of a company. Good Net Working Capital (NWC) in a company will provide efficiency in the business operations carried out. The better Net Working Capital (NWC) indicates that the company carries out efficient operations. This efficiency will have a positive impact on the company's

profitability. According to (Kasozi, 2017), the net working capital of 69 companies in South Africa influences the profitability of a company.

**H2:** Net Working Capital has a positive influence on the profitability of food and beverage industry companies listed on the Indonesian Stock Exchange.

**Asset Management on Profitability.** Asset management is an important component in developing a company. This can illustrate the maximum management of a company's assets. Maximum management of company assets has a significant influence on the efficiency and profits of a company (Priscila & Dewi 2023). A company's inability to carry out asset management will have a major impact on the company's operations. This will affect the company's profitability and development in the future (Haukilo & Widyaswati 2022).

**H3:** Asset management has a positive influence on the profitability of food and beverage industry companies listed on the Indonesian Stock Exchange.

**The influence of Firm Size on profitability.** According to Sajiwo Tri Prakoso, in 2023 company size will have a positive and significant effect on profitability. The larger the company size, the higher its profitability. Large companies that are believed to have more stable and stronger financial conditions are considered to be better able to finance the company's operational activities. Company operational activities that can run well will open up opportunities for the company to earn greater profits. Thus, it can be concluded that company size has a positive effect on profitability. The results of this study are by research conducted by (Sughosa et al., 2020); (Nursetya & Hidayati, 2020) show that company size has a positive effect on profitability.

**H4:** Firm Size moderates the influence of capital structure, net working capital, and asset management on the profitability of Food and Beverage companies listed on the Indonesia Stock Exchange.

## METHODS

The measurement of variables in this study is intended to evaluate the relationship between independent variables and moderating variables on the dependent variable. The dependent variables include Return On Assets (ROA), Tobin's Q (TOBQ), and earnings per Share (EPS). Independent variables consist of Total Debt Ratio (TDR), Debt to Market Capitalization Ratio (DMCR), as well as Net Working Capital measured by Current Ratio (CR) and Days Inventory Outstanding (DIO), and Asset Management measured by Fixed Assets Turnover Ratio (FATO). Firm Size, represented by Total Sales (TS), acts as a moderating variable. The data collection method used is secondary data from the financial statements of food and beverage companies listed on the Indonesia Stock Exchange for the period 2018 to 2022. The research sample includes 43 companies with a total of 215 financial reporting periods, selected through purposive sampling based on criteria such as presence on the Indonesia Stock Exchange during the research period, availability of relevant data, and closing of the financial year in December.

The data testing method used in this research is a quantitative approach to multivariate panel data analysis. This approach aims to examine the effect of capital structure performance, net working capital, and asset management on the profitability of food and beverage companies listed on the Indonesia Stock Exchange (IDX). In multivariate panel data regression analysis, two models are used, namely fixed effect and random effect, which are selected based on the results of the Hausman Test and Chow Test. The Chow Test is used to compare and select between the Common Effect and Fixed Effect models, while the Hausman Test is used to select the better model between the fixed effect model and the random effect model, with predetermined decision-making criteria.

The data analysis method involves the use of multiple regression to examine the relationship between the dependent variable (profitability) and the independent variables (capital structure, net working capital, and asset management), as well as the moderating effect generated through the switching of independent variables with moderating variables. to determine the relationship between the independent variable and the moderating variable on the dependent variable where each measurement displayed on **Table 1**.

**Table 1.** Variable Operational Definitions

Variable Type	Variable	Variable Name	Symbol	Definition of Operational Variables	Reference
Dependent Variable	Profitability	Return On Assets	ROA	Net Income / Total Assets	Ahmed et al. (2023)
		Tobin's Q	TOBQ	(Market Value of Equity + Book Value of Debt) / Book Value of Assets	Ahmed et al. (2023)
		Earning Per Share	EPS	Net Income / Total Shares Outstanding	Ahmed et al. (2023)
		Total Debt Ratio	TDR	Total Debt / Total Assets	Ahmed et al. (2023)
Independent Variable	Capital Structure	Debt to Market Capitalization Ratio	DMCR	Total Debt / (Total Debt + Market Capitalization)	Ahmed et al. (2023)
		Current Ratio	CR	Current Assets / Current Liabilities	Nguyen (2023)
		Days Inventory Outstanding	DIO	Average Inventory*365 / Cost of Goods Sold	Nguyen (2023)
		Fixed Assets Turnover Ratio	FATO	Net Sales / Total Fixed Assets	Priskilla & Dewi (2023)
Moderating Variable	<i>Firm Size</i>	Total Sales	TS	Log of Total Sales	Ahmed et al. (2023)

Multiple regression is a statistical technique that can be used to analyze the relationship between one dependent variable and several independent variables. This research applies multiple regression to test the hypothesis. The researchers developed equations based on the influence of the proposed variables. Direct influences include the influence of capital structure, net working capital, and asset management on profitability. The moderation effect is produced by multiplying the independent variable by the moderation variable to produce the moderation effect.

For example, this study calculates capital structure by multiplying it by liquidity to create a moderation effect (CS\*FS). This research follows a similar procedure to create a



moderating effect on other independent variables, namely Net Working Capital (NWC\*FS) and asset management (MA\*FS) (Ahmed et al. 2023). A similar procedure for writing equations used in this study is as follows:

**Model 1:**

$$Profitability = Q0 + Q1CSit + Q2FSit + Q3(CSit \times FSit) + uit \dots\dots\dots (1)$$

**Model 2:**

$$Profitability = Q0 + Q1NWCit + Q2FSit + Q3(NWCit \times FSit) + uit \dots\dots\dots (2)$$

**Model 3:**

$$Profitability = Q0 + Q1NWCit + Q2FSit + Q3(NWCit \times FSit) + uit \dots\dots\dots (3)$$

Variable i indicates the company and t indicates the time. Meanwhile, Q0, Q2, and Q3 are constants that influence the independent variable on the dependent. Based on this relationship, the research uses multiple regression to analyze each variable in the research. This research looks at the influence of capital structure, net working capital, and asset management on profitability which is moderated by firm size.

## RESULTS

**F-test.** The simultaneous influence test (F test) is used to determine whether the independent variables jointly or simultaneously affect the dependent. The results of partial test processing can be seen in the criteria used in the F test as follows:

If the probability number (p-value) more than 5 per cent (0.050), then *H0* is rejected and *Ha* is accepted, meaning that the independent variable does not affect the dependent variable.

**Table 2.** ROA F Test

Independent Variable	Dependent Variable	Probability Value	Hypothesis	Conclusion
Capital Structure	ROA 1A	0	Ha accepted	Significant effect
Capital Structure	ROA 1B	0	Ha accepted	Significant effect
Net Working Capital	ROA 2A	0	Ha accepted	Significant effect
Net Working Capital	ROA 2B	0	Ha accepted	Significant effect
Asset Management	ROA 3A	0	Ha accepted	Significant effect
Asset Management	ROA 3B	0	Ha accepted	Significant effect

**Table 2** shows, the probability value (F-statistic) for ROA is 0.000. This value is still below 0.050, so it can be concluded that *Ha* is accepted, which means it shows that the dependent variable and the independent variable are influenced simultaneously.

**Table 3. TobinsQ F Test**

Independent Variable	Dependent Variable	Probability Value	Hypothesis	Conclusion
Capital Structure	ROA 1A	0.044	Ha accepted	Significant effect
Capital Structure	ROA 1B	0.088	Ha accepted	Significant effect
<i>Net Working Capital</i>	ROA 2A	0.102	Ha accepted	Significant effect
<i>Net Working Capital</i>	ROA 2B	0.132	Ha accepted	Significant effect
Asset Management	ROA 3A	0.001	Ha accepted	Significant effect
Asset Management	ROA 3B	0	Ha accepted	Significant effect

**Table 3** shows the probability value (F-statistic) for Tobins Q is 0.000. This value is still below 0.050, so it can be concluded that Ha is accepted, which means it shows that the dependent variable and the independent variable are influenced simultaneously.

**Table 4. EPS F Test**

Independent Variable	Dependent Variable	Probability Value	Hypothesis	Conclusion
Capital Structure	ROA 1A	0	Ha accepted	Significant effect
Capital Structure	ROA 1B	0.004	Ha accepted	Significant effect
<i>Net Working Capital</i>	ROA 2A	0.003	Ha accepted	Significant effect
<i>Net Working Capital</i>	ROA 2B	0	Ha accepted	Significant effect
Asset Management	ROA 3A	0	Ha accepted	Significant effect
Asset Management	ROA 3B	0	Ha accepted	Significant effect

**Table 4** shows, the probability value (F-statistic) for EPS is 0.00000. This value is still below 0.050, so it can be concluded that Ha is accepted, which means it shows that the dependent variable and the independent variable are influenced simultaneously.

**Hypothesis Test (T).** This t-statistical test is used to determine how much influence the independent variable has in explaining the dependent variable. Statistical hypothesis testing is done by looking at the probability value of the analysis results using Eviews 12. Hypothesis testing is carried out based on a significance level value of 0.050 ( $\alpha$  of 5 per cent). Acceptance or rejection of the hypothesis is done with the criteria, namely if the probability value more than 0.050 then the hypothesis is rejected (regression coefficient is not significant). This states that partially the independent variable has no significant effect on the dependent variable. If the probability value less than or equal to 0.050, then the hypothesis is accepted (significant regression coefficient).





**Table 5. ROA T Test**

Independent Variable	Dependent Variable	Variables	Moderation (Firm Size)	Coefficient	Probability Value	Hypothesis	Conclusion
Capital Structure	ROA 1A	TDR	-	0.226	0,000	Ha accepted	Significant effect
		DMCR	-	-0.087	0.123	Ha rejected	No effect
Capital Structure	ROA 1B	TDR	✓	-0.259	0.000	Ha accepted	Significant effect
		DMCR	✓	-0.073	0.265	Ha rejected	No effect
Net Working Capital	ROA 2A	CR	-	0.008	0.116	Ha rejected	No effect
		DIO	-	0.001	0.004	Ha accepted	Significant effect
Net Working Capital	ROA 2B	CR	✓	0.001	0.672	Ha rejected	No effect
		DIO	✓	-0.000	0.397	Ha rejected	No effect
Asset Management	ROA 3A	FATO	-	0.000	0.048	Ha accepted	Significant effect
Asset Management	ROA 3B	FATO	✓	0.007	0.000	Ha accepted	Significant effect

**Table 5**, several test results can be seen as : TDR and DMCR variables on the ROA variable. TDR probability value is 0.000 and shows that the Ha result is accepted. The probability value is smaller than 0.050 so it can be said that there is a significant positive influence between the TDR variable and the ROA variable. **Table 5** shows, the DCMR probability value is 0.123 and shows that the Ha result is rejected. The probability value is greater than 0.050 so there is no influence between the DCMR variable and the ROA variable.

TDR and DCMR variables which are moderated by Firm Size on the ROA variable. The probability of TDR moderated by firm size is 0.0000 and shows that Ha results are accepted. The probability value is smaller than 0.050 so it can be said that there is a negative influence between the TDR variable and the ROA variable which is moderated by firm size. DCMR probability value moderated by firm size is 0.265 and shows that the Ha result is rejected. The probability value is greater than 0.050 so there is no influence between the DCMR variable which is moderated by firm size and the ROA variable.

CR and DIO variables against the ROA variable. CR probability value is 0.116, indicating that the Ha result is rejected. The probability value is greater than 0.050 so there is no influence between the CR variable and the ROA variable. DIO probability value is 0.003 and shows that the Ha result is accepted. The probability value is smaller than 0.050, so there is a positive influence between the DIO variable and the ROA variable.

CR and DIO variables which are moderated by Firm Size on the ROA variable. CR probability value moderated by firm size is 0.672, indicating that the Ha result is rejected. The probability value is greater than 0.050 so there is no influence between the CR variable which is moderated by firm size on the ROA variable. Probability value for DIO moderated by firm size is 0.396 and shows that the Ha result is rejected. The probability value is greater than 0.050 so there is no influence between the DIO variable moderated by firm size and the ROA variable.

FATO variable against the ROA variable. FATO probability value is 0.0480 and shows that the Ha result is accepted. The probability value is smaller than 0.050 so it can be

said that there is a significant positive influence between the FATO variable and the ROA variable.

FATO variable which is moderated by Firm Size on the ROA variable. FATO probability value moderated by firm size is 0.048 and shows that the Ha result is accepted. The probability value is smaller than 0.050 so it can be said that there is a significant positive influence between the FATO variable which is moderated by firm size and the ROA variable

**Table 6.** TOBINS Q T Test

Independent Variable	Dependent Variable	Variables	Moderation (Firm Size)	Coefficient	Probability Value	Hypothesis	Conclusion
Capital Structure	TOBINSQ 1A	TDR	-	11.487	0.080	Ha rejected	No effect
		DMCR	-	- 22.991	0.020	Ha accepted	Significantly influenced
Capital Structure	TOBINSQ 1B	TDR	✓	- 27.872	0.059	Ha rejected	No effect
		DMCR	✓	- 27.872	0.004	Ha accepted	Significant effect
Net Working Capital	TOBINSQ 2A	CR	-	- 0.021	0.232	Ha rejected	No effect
		DIO	-	- 0.002	0.001	Ha accepted	Significant Effect
Net Working Capital	TOBINSQ 2B	CR	✓	0.003	0.086	Ha rejected	No effect
		DIO	✓	0.002	0.044	Ha accepted	Significant effect
Asset Management	TOBINSQ 3A	FATO	-	0.020	0.000	Ha accepted	Significant effect
Asset Management	TOBINSQ 3B	FATO	✓	0.020	0.003	Ha accepted	Significant effect

**Table 6** shows, several test results can be seen as follows:

TDR and DMCR variables against the Tobins Q variable. TDR probability value is 0.080 and shows that the Ha result is rejected. The probability value is greater than 0.050, so it can be said that there is no influence between the TDR variable and the Tobins Q variable. DCMR probability value is 0.020 and shows the Ha result is accepted. The probability value is smaller than 0.050 so there is a negative influence between the DCMR variable and the Tobins Q variable.

TDR and DCMR variables moderated by Firm Size against the Tobins Q variable. TDR probability moderated by firm size is 0.059 and shows that the Ha result is rejected. The probability value is greater than 0.050 so it can be said that there is no influence between the TDR variable which is moderated by firm size and the Tobins Q variable. DCMR probability value moderated by firm size is 0.004 and shows that the Ha result is accepted. The probability value is smaller than 0.050 so that the DCMR variable moderated by firm size has a negative effect on the Tobins Q variable

CR and DIO variables against the Tobins Q variable. CR probability value is 0.232, indicating that the Ha result is rejected. The probability value is greater than 0.050 so there



is no influence between the CR variable and the Tobins Q variable. **Table 6** shows DIO probability value is 0.000 and shows that the Ha result is accepted. The probability value is smaller than 0.050 so the DIO variable has a positive effect on the Tobins Q variable.

CR and DIO variables which are moderated by Firm Size against the Tobins Q variable. CR probability value moderated by firm size is 0.086, indicating that the Ha result is rejected. The probability value is greater than 0.050 so there is no influence between the CR variable moderated by firm size and the Tobins Q variable. DIO probability value moderated by firm size is 0.044 and shows that the Ha result is accepted. The probability value is greater than 0.050 so that the DIO variable which is moderated by firm size has a positive influence on the Tobins Q variable.

FATO variable against the Tobins Q variable. **Table 6** shows FATO probability value is 0.000 and shows that the Ha result is accepted. The probability value is smaller than 0.050 so it can be said that there is a significant positive influence between the FATO variable and the Tobins Q variable

FATO variable moderated by Firm Size against the Tobins Q variable. FATO probability value moderated by firm size is 0.003 and shows that the Ha result is accepted. The probability value is smaller than 0.050 so it can be said that there is a significant positive influence between the FATO variable which is moderated by firm size and the Tobins Q variable.

**Table 7. EPS T-test**

Independent Variable	Dependent Variable	Variable s	Moderation (Firm Size)	Coefficient	Probability Value	Hypothesis	Conclusion
Capital Structure	EPS 1A	TDR	-	0.937	0.041	Ha accepted	Significant effect
		DMCR	-	-0.559	0.607	Ha rejected	No effect
Capital Structure	EPS 1B	TDR	✓	-3.034	0.000	Ha accepted	Significant effect
		DMCR	✓	-3.034	0.409	Ha rejected	No effect
Net Working Capital	EPS 2A	CR	-	45.250	0.013	Ha accepted	Significant effect
		DIO	-	1.719	0.010	Ha accepted	Significant effect
Net Working Capital	EPS 2B	CR	✓	-3.902	0.857	Ha rejected	No effect
		DIO	✓	3.227	0.000	Ha accepted	Significant effect
Asset Management	EPS 3A	FATO	-	23.149	0.000	Ha accepted	Significant effect
	Asset Management	EPS 3B	FATO	✓	18.426	0.014	Ha accepted

**Table 7** shows, several test results can be seen as follows:

TDR and DMCR variables on EPS variables. TDR probability value is 0.041 and shows that Ha results are accepted. The probability value is smaller than 0.050, so it can be said that the TDR variable has a positive influence on the EPS variable. **Table 7** shows



DCMR probability value is 0.607 and shows that the  $H_a$  result is rejected. The probability value is greater than 0.050 so there is no influence between the DCMR variable and the EPS variable.

TDR and DCMR variables which are moderated by Firm Size on the EPS variable. **Table 7** shows probability of TDR moderated by firm size is 0.000 and shows that  $H_a$  results are accepted. The probability value is smaller than 0.050 so it can be said that there is a negative influence between the TDR variable which is moderated by firm size and the EPS variable. DCMR probability value moderated by firm size is 0.409 and shows that the  $H_a$  result is rejected. The probability value is greater than 0.050 so that the DCMR variable which is moderated by firm size has no effect on the EPS variable.

**Table 7** shows CR and DIO variables on EPS variables. CR probability value is 0.013, indicating that the  $H_a$  result is accepted. The probability value is smaller than 0.050 so there is a positive influence between the CR variable and the EPS variable. DIO probability value is 0.010 and shows that the  $H_a$  result is accepted. The probability value is smaller than 0.050 so that the DIO variable has a positive effect on the EPS variable.

CR and DIO variables which are moderated by Firm Size on the EPS variable. **Table 7** shows CR probability value moderated by firm size is 0.857, indicating that the  $H_a$  result is rejected. The probability value is greater than 0.050 so there is no influence between the CR variable which is moderated by firm size on the EPS variable. DIO probability value moderated by firm size is 0.000 and shows that  $H_a$  results are accepted. The probability value is greater than 0.050 so that the DIO variable which is moderated by firm size has a positive influence on the EPS variable.

FATO variable against the EPS variable. **Table 7** shows FATO probability value is 0.000 and shows that the  $H_a$  result is accepted. The probability value is smaller than 0.050 so it can be said that there is a significant positive influence between the FATO variable and the EPS variable.

FATO variable which is moderated by Firm Size on the EPS variable. **Table 7** shows FATO probability value moderated by firm size is 0.014 and shows that the  $H_a$  result is accepted. The probability value is smaller than 0.050 so it can be said that there is a significant positive influence between the FATO variable which is moderated by firm size and the EPS variable.

**R-Square Test.** R-squared is a measure of how much influence an independent variable (exogenous) has on the dependent variable (endogenous). R-squared is a number between 0 and 1 which indicates the size of the combination of independent variables that affect the value of the dependent variable. The R-squared value ( $R^2$ ) is used to assess how much influence a particular independent latent variable has on the dependent latent variable. R-squared or can be called the coefficient of determination serves to assess the contribution made by the independent variable to the dependent variable. The R-Square processing produces the following values:

**Table 8.** ROA R-Square

Independent Variable	Dependent Variable and Model	Moderation (Firm Size)	Value R-Square	R-Square (per cent) Influential
Capital Structure	ROA 1A	-	0.769	76.966 per cent
Capital	ROA 1B	✓	0.802	80.272 per cent



Structure				
<i>Net Working Capital</i>	ROA 2A	-	0.643	64.322 per cent
<i>Net Working Capital</i>	ROA 2B	✓	0.640	64.096 per cent
Asset Management	ROA 3A	-	0.625	62.571 per cent
Asset Management	ROA 3B	✓	0.717	71.700 per cent

**Table 8** shows several test results can be seen as follows The influence of independent variables that influence profitability can be assessed as having a significant effect on ROA with or without firm size moderation. Because the R-Square percentage is more than 50 per cent for each independent variable which is moderated or not.

This finding underscores the substantial explanatory power of the independent variables in elucidating the variation in ROA. Regardless of whether moderation by firm size is present, each independent variable exerts a considerable influence on ROA, as evidenced by their R-Square percentages exceeding 50 per cent.

Such robust explanatory capacity suggests that changes in these independent variables have a substantial impact on ROA, contributing significantly to its determination. Thus, whether analyzed independently or within the context of firm size moderation, these variables emerge as potent drivers of ROA, underscoring their crucial role in assessing and understanding profitability within the studied framework.

**Table 9.** TOBQ R-Square

Independent Variable	Dependent Variable and Model	Moderation (Firm Size)	Value R-Square	R-Square (per cent) Influential
Capital Structure	TOBQ 1A	-	0.089	8.944 per cent
Capital Structure	TOBQ 1B	✓	0.070	7.030 per cent
<i>Net Working Capital</i>	TOBQ 2A	-	0.081	8.198 per cent
<i>Net Working Capital</i>	TOBQ 2B	✓	0.091	9.124 per cent
Asset Management	TOBQ 3A	-	0.117	11.756 per cent
Asset Management	TOBQ 3B	✓	0.507	50.794 per cent

**Table 9** TOBQ R-Square moderated by firm size the influence of independent variables that influence profitability can be assessed as having a moderate effect on TQ with or without moderation by firm size. Because the R-Square percentage is less than 20 per cent for each independent variable which is moderated or not and only one variable, namely asset management which is moderated by firm size, has a significant influence on TOBQ, namely with a percentage of 50.794 per cent.

Across all independent variables, whether moderated by firm size or not, the R-Square percentages fall below 20 per cent. This suggests that their individual contributions to



explaining the variability in Tobins Q are modest. However, amidst this pattern, one notable exception emerges: asset management when moderated by firm size.

Remarkably, asset management, under the influence of firm size moderation, exhibits a significant impact on Tobins Q, as evidenced by its R-Square percentage of 50.794 per cent. This substantial figure indicates that changes in asset management, particularly when contextualized within the framework of firm size moderation, play a pivotal role in shaping Tobins Q.

Therefore, while the overall effect of independent variables on Tobins Q may be characterized as moderate, the nuanced influence of asset management moderated by firm size stands out as a key driver of Tobins Q, offering valuable insights into the dynamics of profitability within the studied context.

**Table 10.** EPS R-Square

Independent Variable	Dependent Variable and Model	Moderation (Firm Size)	Value R-Square	R-Square (per cent) Influential
Capital Structure	EPS 1A	-	0.633	63.356 per cent
Capital Structure	EPS 1B	✓	0.124	12.475 per cent
Net Working Capital	EPS 2A	-	0.114	11.460 per cent
Net Working Capital	EPS 2B	✓	0.189	18.978 per cent
Asset Management	EPS 3A	-	0.817	81.786 per cent
Asset Management	EPS 3B	✓	0.819	81.911 per cent

**Table 10** shows EPS R-Square moderated by firm size influence of independent variables that influence profitability can be assessed as having a moderate effect on EPS with or without moderation by firm size because the R-Square percentage for several independent variables that are moderated or not is less than 20 per cent, such as the capital structure variable which is moderated by firm size, net working capital which is not moderated by firm size, and net working capital which is moderated by firm size. Meanwhile, several variables have an R-Square percentage more than 50 per cent, namely capital structure which is not moderated by firm size, asset management which is not moderated by firm size, and asset management which is moderated by firm size.

For instance, the capital structure variable, whether moderated by firm size or not, exhibits an R-Square percentage of less than 20 per cent. This suggests a moderate effect on EPS. Similarly, net working capital, whether moderated by firm size or not, also demonstrates an R-Square percentage below 20 per cent, indicating a moderate influence on EPS.

Conversely, certain variables present substantial effects on EPS, with R-Square percentages surpassing 50per cent. Notably, capital structure, when not moderated by firm size, and asset management, whether moderated by firm size or not, fall into this category. These variables exert a significant impact on EPS, implying that changes in capital structure and asset management have considerable implications for profitability.



Overall, while some independent variables exhibit moderate effects on EPS, others wield substantial influence, underscoring the importance of considering factors such as firm size moderation in comprehensively assessing their impact on profitability.

## DISCUSSION

The probability value (F-statistic) of ROA value is still low. So,  $H_a$  is accepted, which means that the dependent and independent variables are simultaneously influenced. The probability value (F-statistic) of Tobin's Q. This value is still below; it can be concluded that  $H_a$  is accepted, which means it shows that the dependent and independent variables simultaneously influence. The probability value (F-statistic) of EPS is still low, so it can be concluded that  $H_a$  is accepted, which means that the dependent and independent variables simultaneously influence.

In the results of data testing, it can be seen that in the F-test data results on three dependent variables with several multiple regression statistical processing models, the values obtained in Prob (F-Statistic) are ROA less than Tobin's Q less than EPS less than which can be concluded that  $H_a$  is accepted, which means it shows that the dependent variable and the independent variables simultaneously influence.

Testing was conducted to examine various variables and their impact on Return on Assets (ROA), and several significant findings emerged. The Total Debt Ratio (TDR) showed a significant favorable influence on ROA, while the Debt Market Capitalization Ratio (DMCR) did not show a significant effect. When TDR was moderated by company size, a significant negative impact on ROA was observed, while DMCR did not show a significant influence when moderated by company size. Additionally, neither the Current Ratio (CR) nor the Days Inventory Outstanding (DIO) independently affected ROA significantly, although DIO showed a significant positive impact. However, when both variables were moderated by company size, neither significantly influenced ROA.

On the other hand, Fixed Asset Turnover (FATO) significantly impacted ROA positively, and this influence remained significant when FATO was moderated by company size. In conclusion, the variables TDR, DIO, and FATO significantly impacted ROA. In contrast, the variables DMCR, CR, and DIO moderated by company size did not show a significant effect.

The analysis of the test results provides valuable insights into the relationships between various variables and the Tobins Q variable. Total Debt Ratio (TDR) does not significantly impact Tobins Q, whereas Debt to Market Capitalization Ratio (DMCR) exhibits a significant negative influence. Moreover, when moderated by firm size, TDR remains insignificant, while DMCR retains its negative effect on Tobins Q. Similarly, Current Ratio (CR) does not significantly affect Tobins Q, whereas Days Inventory Outstanding (DIO) shows a significant positive influence. Interestingly, when moderated by firm size, CR continues to be insignificant, while DIO maintains its positive impact on Tobins Q. Furthermore, Fixed Asset Turnover (FATO) demonstrates a significant positive effect on Tobins Q, and this effect remains significant when FATO is moderated by firm size. In conclusion, while some variables like TDR and CR do not significantly affect Tobins Q, others such as DMCR, DIO, and FATO exhibit significant influences, with DIO and FATO showing notable impacts even when moderated by firm size. These findings provide valuable insights for understanding the determinants of Tobins Q in financial analysis contexts.

The analysis of the test results provides valuable insights into the relationships between various variables and Earnings Per Share (EPS). It is evident that the Total Debt Ratio (TDR) positively influences EPS, while the Debt to Market Capitalization Ratio (DMCR) does not exhibit a significant effect. Interestingly, when TDR is moderated by firm size, it demonstrates a negative influence on EPS, highlighting the importance of considering firm size in understanding this relationship. Similarly, both Current Ratio (CR) and Days Inventory Outstanding (DIO) positively impact EPS, with DIO also showing a significant positive effect when moderated by firm size. Conversely, CR moderated by firm size does not have a significant influence on EPS. Moreover, Fixed Asset Turnover (FATO) significantly influences EPS positively, and this effect is further pronounced when FATO is moderated by firm size. In summary, while certain variables such as TDR, CR, DIO, and FATO have significant impacts on EPS, the influence of DMCR is not significant. Additionally, considering firm size as a moderating factor provides further depth in understanding these relationships within financial analysis contexts.

Similarly, the analysis extends to the relationships between various variables and Tobins Q. While Total Debt Ratio (TDR) does not significantly impact Tobins Q, Debt to Market Capitalization Ratio (DMCR) exhibits a notable negative influence. Interestingly, when moderated by firm size, TDR remains insignificant, while DMCR retains its negative effect on Tobins Q. Additionally, Current Ratio (CR) does not significantly affect Tobins Q, whereas Days Inventory Outstanding (DIO) shows a significant positive influence. Even when moderated by firm size, CR continues to be insignificant, while DIO maintains its positive impact on Tobins Q. Furthermore, Fixed Asset Turnover (FATO) demonstrates a significant positive effect on Tobins Q, which persists when moderated by firm size. Thus, while some variables like TDR and CR do not significantly affect Tobins Q, others such as DMCR, DIO, and FATO exhibit significant influences, with DIO and FATO showing notable impacts even when moderated by firm size.

The analysis also sheds light on the relationships between various variables and Earnings Per Share (EPS). Total Debt Ratio (TDR) positively influences EPS, while Debt to Market Capitalization Ratio (DMCR) does not exhibit a significant effect. Notably, when TDR is moderated by firm size, it demonstrates a negative influence on EPS. Similarly, both Current Ratio (CR) and Days Inventory Outstanding (DIO) positively impact EPS, with DIO also showing a significant positive effect when moderated by firm size. However, CR moderated by firm size does not have a significant influence on EPS. Moreover, Fixed Asset Turnover (FATO) significantly influences EPS positively, with its effect further pronounced when moderated by firm size. In summary, while certain variables such as TDR, CR, DIO, and FATO have significant impacts on EPS, the influence of DMCR is not significant. Additionally, considering firm size as a moderating factor provides further depth in understanding these relationships within financial analysis contexts.

## CONCLUSION

This study delves into the intricate dynamics of capital structure, net working capital, and asset management on firm profitability while incorporating firm size as a moderating factor. Through various models, it was found that Total Debt Ratio (TDR) and Debt to Market Capitalization Ratio (DMCR) positively influence return on assets (ROA) and total quality (TQ), whereas Tangibility of Assets (TS) has a negative impact. Additionally, the interaction between these variables was observed to moderate their effects on both ROA





and TQ. Furthermore, the study highlights the influence of these variables on earnings per share (EPS), indicating their significance in shaping firm profitability. This comprehensive analysis underscores the nuanced relationship between financial metrics and profitability, offering valuable insights for strategic decision-making in corporate finance.

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