

**THE EFFECT OF WORKING CAPITAL TURNOVER AND LEVERAGE ON
PROFITABILITY, WITH COMPANY SIZE AS A MEDIATING VARIABLE****Durotun Nafisa¹****Universitas Swadaya Gunung Jati, Cirebon, Indonesia**durotun.122040118@ugj.ac.id**Wiwit Apit Sulistyowati²****Universitas Swadaya Gunung Jati, Cirebon, Indonesia**wiwit.apit.sulistyowati@ugj.ac.id

Abstract

This study aims to analyze the effect of Working Capital Turnover and Leverage on Profitability with Firm Size as a mediating variable in manufacturing companies within the non-cyclical consumer goods subsector listed on the Indonesia Stock Exchange (IDX). The study population consisted of 132 companies, and the data were analyzed using the Partial Least Squares Structural Equation Modeling (PLS-SEM) method. The findings reveal that Working Capital Turnover has a significant negative effect on Profitability but does not significantly affect Firm Size. Leverage has a significant positive effect on Firm Size but does not have a significant direct effect on Profitability. In addition, Firm Size has a significant negative effect on Profitability, indicating that an increase in company assets does not necessarily result in a proportional increase in profit generation. The mediation analysis shows that Firm Size does not mediate the relationship between Working Capital Turnover and Profitability, whereas it significantly and negatively mediates the relationship between Leverage and Profitability. These results suggest that leverage can encourage firm growth through increased assets; however, such growth may reduce profitability. Overall, the study confirms that the relationship between financial structure and profitability is not always direct and can be influenced by indirect mechanisms through Firm Size. Therefore, companies should focus on effective working capital management and optimal leverage utilization to ensure that business growth is accompanied by improved profitability. Furthermore, this study contributes to the corporate finance literature by highlighting the importance of mediating variables in explaining the relationship between financial factors and firm performance.

Keywords: Working Capital Turnover, Leverage, Profitability, Firm Size

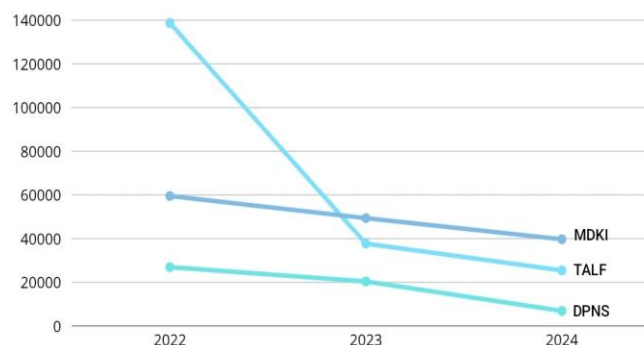


INTRODUCTION

Profitability is one of the key indicators used to assess a company's financial performance, as it reflects the company's ability to generate profits from its available resources Muthohharoh (2021). A stable and increasing level of profitability indicates effective asset management, a sound capital structure, and operational efficiency Fathoni (2021). Conversely, a decline in profitability may indicate issues with working capital turnover or the level of leverage the company employs. Working capital turnover reflects a company's effectiveness in utilizing working capital to generate revenue. A high working capital turnover ratio can signal operational efficiency and management's ability to manage current assets productively. Leverage indicates the level of debt used in a company's financing. Appropriate use of leverage can signal management's confidence in future profit prospects; however, excessively high leverage can be interpreted as a sign of increasing financial risk for the company.

Over the past three years, several companies in the manufacturing sector have experienced a decline in net profit, as seen in PT Duta Pertiwi Nusantara Tbk (DPNS), PT Tunas Alfin Tbk (TALF), and PT Edeki Tbk (EMDK) during the period from 2022 to 2024. Duta Pertiwi Tbk's net profit has shown a significant downward trend, recording Rp 26.95 billion in 2022, Rp 20.39 billion in 2023, and a sharp decline to Rp 6.89 billion in 2024. A substantial decline in net profit also occurred at PT Tunas Alfin Tbk, which recorded a net profit of Rp 138 billion in 2022, while by the end of 2024, the net profit had dropped to just Rp 25.45 billion. A similar situation was experienced by PT Edeki Tbk, which saw a decline in net profit as shown in the figure 1.

Figure 1
Net profit at the end of 2022-2024



Source: Data compiled and obtained from the annual report by the researcher

This phenomenon of declining net profit has been examined in various studies. However, to date, there remains a gap among these studies, such as that



conducted by Maulana & Nurwani (2022), who found that working capital turnover has a significant negative effect on profitability, whereas according to Aryani et al (2024), working capital turnover actually has a significant positive effect on profitability; meanwhile, Febyansyah (2024), Aryani et al (2024), and Fathoni (2021) found that leverage has a significant negative effect on profitability; however, according to Hidayat & Oktaviano (2024), and Santoso (2026) found that leverage has a significant positive effect on profitability, and regarding the firm size variable, according to Sabakodi & Andreas (2024), it has a significant positive effect on profitability, while according to Maulana & Nurwani (2022), and Verdina & Lestari (2025), firm size has a significant negative effect on profitability, whereas according to Anisa (2024) and Aryani et al (2024) These conflicting findings make this study worthwhile to conduct in order to re-examine the nature of these effects; furthermore, to broaden our understanding, this study will introduce a mediating variable Company Size to determine whether mediation clarifies the influence of these variables on Profitability. The inclusion of this moderating variable is one of the novel aspects of this study, as few researchers have incorporated it as a moderator, making this research even more compelling to undertake.

This study employs the Agency Theory proposed by Jensen & Meckling (1976), which explains the contractual relationship between the principal (shareholders) and the agent (managers) that has the potential to give rise to conflicts of interest and agency costs due to differing objectives and information asymmetry. In the context of corporate finance, decisions regarding capital turnover, leverage, and firm size reflect control mechanisms that can influence managers' behavior in managing resources to align with shareholders' interests. Leverage, for example, can serve as a disciplinary tool to limit managers' opportunistic actions through the pressure of debt repayment obligations, while optimal capital turnover efficiency can enhance profitability as an indicator of the agent's success in fulfilling the principal's objectives. Therefore, this study is expected to provide a theoretical contribution by integrating

In addition, this study also offers theoretical benefits by reinforcing the relevance of Agency Theory in explaining the relationship between financial decisions and profitability, while providing empirical evidence regarding the role of firm size as a mediating variable in strengthening or weakening the effects of working capital turnover and leverage on profitability in manufacturing firms in Indonesia. As for the practical benefits of this study, it is expected to provide benefits to company management as a basis for consideration in decision-making regarding working capital management and the use of leverage to improve



company profitability. Furthermore, in terms of policy and institutional benefits, this study is expected to provide benefits to corporate policymakers as a basis for designing internal company policies that encourage sound and sustainable financial decision-making.

LITERATURE REVIEW

Agency Theory

The Agency Theory proposed by Jensen & Meckling (1976) explains that there is a contractual relationship between shareholders as principals and managers as agents that has the potential to give rise to conflicts of interest and information asymmetry, because managers have greater access to internal company information than shareholders. Under these conditions, financial decisions such as capital turnover, leverage, and firm size serve as control mechanisms that can be used to minimize agency conflicts and ensure that managers act in the best interests of shareholders. The use of leverage, for example, can enhance external oversight through debt repayment obligations, while capital turnover efficiency reflects managers' ability to optimally manage assets to generate profits. Previous studies Sabakodi & Andreas (2024), Maulana & Nurwani (2022), and Verdina & Lestari (2025) indicate that these financial variables not only directly influence firm performance but also reflect the effectiveness of managers in fulfilling their responsibilities to shareholders. Therefore, Agency Theory is relevant for explaining the relationship between capital turnover, leverage, firm size, and profitability, as profitability reflects managers' success in efficiently managing the firm's resources to maximize shareholder welfare.

Profitability

Profitability refers to a company's ability to generate profits from its operational activities and available resources. Profitability is often used as a key indicator of financial performance because it reflects the effectiveness of management in managing the company's assets and capital. Common profitability ratios used in financial research include Return on Assets (ROA) and Return on Equity (ROE). According to Fathoni (2021), profitability is influenced by various internal factors within a company, including its capital structure and the efficiency of capital utilization. Aryani et al (2024) also state that profitability serves as a crucial signal for investors as it is directly linked to the potential return on investment and the sustainability of the company's operations.

Leverage

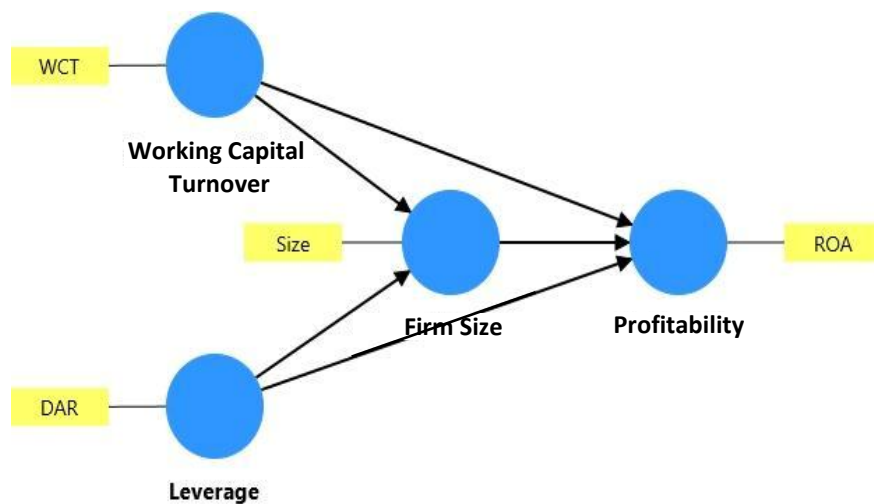


Leverage indicates the extent to which a company uses debt in its financing. The use of leverage can provide benefits in the form of increased investment capacity, but it also increases financial risk if not managed optimally. Fathoni (2021) and Santoso (2026) state that leverage affects profitability, both positively and negatively, depending on the company's ability to generate profits to cover debt service. In Agency Theory, leverage reflects management's confidence in future cash flow prospects; however, excessive leverage can lead to conflicts of interest.

Firm Size

Firm size describes the size of a company, which is generally measured by total assets, total sales, or the natural logarithm of total assets. Larger firms tend to have broader access to financing, greater business stability, and a higher capacity for risk diversification. Aryani et al (2024) and Verdina & Lestari (2025) state that firm size influences financial performance and can strengthen or weaken the relationship between financial variables and profitability. Therefore, firm size in this study is positioned as a mediating variable that bridges the effects of working capital turnover and leverage on profitability.

Figure 1
Conceptual Framework



Source: Data analyzed using SmartPLS 4

Research Hypothesis

Working capital turnover is a ratio that describes the level of efficiency in the use of working capital to generate sales Hidayat & Oktaviano (2024). From the perspective of Agency Theory proposed by Jensen & Meckling (1976), the efficiency of current asset management reflects the performance of managers as



agents in optimizing the company's resources. However, excessively high working capital turnover may indicate a relative shortage of working capital relative to operational activities, thereby increasing liquidity risk and compressing profit margins. Research Maulana & Nurwani (2022) found that overly aggressive working capital management can have a negative impact on profitability. Thus, the higher the working capital turnover, the greater the potential for a decline in the company's profitability.

H1: Working Capital Turnover has a significant negative effect on Profitability.

A high working capital turnover may reflect a relatively limited amount of current assets compared to sales volume, indicating a relatively small scale of resources. Within the framework of Agency Theory Jensen & Meckling (1976), this asset constraint may limit managers' flexibility in expanding the business. Research by Akhmad et al (2022) indicates that companies with smaller working capital tend to face limitations in supporting long-term asset growth. Therefore, high working capital turnover may imply a relatively smaller firm size, thereby supporting the hypothesis that working capital turnover has a negative effect on firm size. Thus,

H2: Working capital turnover has a significant negative effect on firm size.

Company size, as proxied by total assets, reflects the magnitude of resources managed by the company. From the perspective of Agency Theory Jensen & Meckling (1976), the larger the company, the more complex its organizational structure, and the higher the potential for agency costs arising from the separation of ownership and management. This finding aligns with the research by Akhmad et al (2022), which reinforces the argument that operational efficiency is not always the primary determinant in the formation of firm scale; thus, the relationship between capital turnover and firm size in this study was not statistically significant. This complexity can lead to operational inefficiencies and increase fixed costs, thereby reducing profitability. Research by Aryani et al (2024) and the findings of Doğan (2020) indicate that larger firm size does not always lead to increased profits; in fact, it can negatively impact profitability due to inefficiencies and overinvestment.

H3: Firm size has a significant negative effect on profitability

In a mediating relationship, high working capital turnover can influence a firm's asset scale before affecting profitability. According to Agency Theory Jensen & Meckling (1976), constraints on working capital can limit managers' ability to expand assets, resulting in a smaller firm size. A small firm size can further limit access to financing and operational efficiency, ultimately leading to



a decline in profitability. A study Kiymaz et al (2024) indicates that working capital policies have indirect consequences on a firm's asset structure and performance. Thus, firm size can serve as a mediating variable in explaining the negative impact of working capital turnover on profitability. This explains why an increase in firm size is associated with a decline in profitability in this study. This finding is consistent with the findings of Aryani et al (2024) and Doğan (2020), who state that firm size has a negative effect

H4: Firm size mediates the relationship between working capital turnover and profitability.

Leverage is a ratio that indicates the extent to which a company uses debt to finance its assets Aryani et al (2024). From the perspective of Agency Theory proposed by Jensen & Meckling (1976), the use of debt can serve as a disciplinary mechanism for managers while also acting as a means to secure additional resources for expanding operational activities. Increased leverage enables a company to obtain external funds, which are then used for fixed asset investments, business expansion, or increased production capacity, thereby increasing total assets a proxy for company size. This finding is supported by research Ramli (2022), which found that leverage has a positive effect on a company's asset growth. Additionally, a study by Thuc & Nguyen (2020) also indicates that access to debt financing contributes to an increase in firm scale through asset expansion.

H5: Leverage has a significant positive effect on Firm Size.

A high level of leverage reflects a company's heavy reliance on debt-based financing, which comes with the obligation to pay interest and principal on loans. According to Agency Theory Jensen & Meckling, (1976), debt can reduce agency conflicts; however, at high levels, it actually increases financial risk and bankruptcy costs. The larger the proportion of debt, the greater the interest burden the company must bear, which has the potential to cause a decline in net income. Fathoni (2021) found that leverage has a significant negative effect on profitability because high fixed costs reduce the company's ability to generate profits.

H6: Leverage has a significant negative effect on profitability.

In a mediating relationship, high leverage can increase firm size through asset expansion; however, this growth in size is not always accompanied by increased efficiency. According to Agency Theory, Jensen & Meckling (1976), larger firms tend to face greater organizational complexity and higher agency costs, which can reduce profitability. Thus, leverage drives asset growth (firm size), but increasing size can lead to inefficiencies and higher operating costs,



thereby negatively impacting profits. Research by Pratama & Suwarti (2021) indicates that firm size can weaken the effect of leverage on financial performance through increased operating costs.

H7: Firm size significantly and negatively mediates the relationship between leverage and profitability.

RESEARCH METHOD

This study employs a quantitative approach, which emphasizes testing relationships between variables through the analysis of numerical data and statistical methods. The quantitative approach was chosen because this study aims to empirically test the effects of capital turnover and leverage on profitability, with firm size serving as a mediating variable. Studies by Sabakodi & Andreas (2024), Aryani et al (2024), and Verdina & Lestari (2025) also employed a quantitative approach in examining the relationship between financial structure variables and firm performance. This indicates that the quantitative approach is relevant and consistently used to analyze corporate financial phenomena based on financial statement data.

Variable Operationalization

Table 1
Variable measurement indicators

Variable	Indicators	Reference
Profitability (Y)	$ROA = \frac{Net\ Profit}{Total\ Assets}$	Fathoni (2021)
Working capital turnover (X1)	$WCT = \frac{Net\ Sales}{Current\ Assets - Current\ Liabilities}$	Aryani (2024)
Leverage (X2)	$DAR = \frac{Total\ Debt}{Total\ Assets}$	Fathoni (2021)
Firm Size (Z)	Size = Ln (Total Assets)	Fathoni (2021)

Sample Population

The population in this study consists of all manufacturing companies in the non-cyclical consumer goods subsector listed on the Indonesia Stock Exchange (IDX). Based on available data, there were 132 manufacturing companies in the non-cyclical consumer goods subsector listed on the IDX during the study period.

The selection of manufacturing companies as the study population was based on the characteristics of the manufacturing sector, which is capital-intensive, has a diverse funding structure, and involves complex operational activities, making it relevant for examining the effects of capital turnover and leverage on profitability. The sampling technique used in this study is purposive

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sampling, which involves selecting a sample based on specific criteria aligned with the research objectives. The sampling criteria for this study include manufacturing companies in the consumer non-cyclicals subsector listed on the Indonesia Stock Exchange (IDX) during the study period, companies that published complete annual reports accessible to the public from 2020 to 2024, the company's financial statements are presented in Indonesian Rupiah to ensure data uniformity and consistency; the company remains actively listed on the IDX through 2024 and has not been delisted during the study period; and companies with data inputs that do not compromise or disrupt data quality.

Based on these criteria, out of a total of 132 manufacturing companies in the consumer non-cyclicals subsector listed on the IDX, 40 companies were identified as meeting all criteria and were selected as the research sample. With an observation period of five years (2020–2024), the number of observations used in this study provides sufficient panel data for empirical analysis. Data analysis was conducted using the Partial Least Squares - Structural Modeling (PLS-SEM) method.

RESULTS AND DISCUSSION

Descriptive Statistical Analysis

Descriptive statistical analysis is intended to provide an overview of the research subjects, including the minimum, maximum, mean, and standard deviation of each research variable. Table 2 below presents the descriptive results for the variables WCT, DAR, Size, and ROA. Sativani et al (2024).

Table 2
Descriptive Statistical Analysis

Name	Mean	Scale min	Scale max	Standard deviation
WCT	0,313	-9,346	10,941	1,548
DAR	0,397	0,067	0,888	0,198
Size	15,699	11,888	19,122	1,553
ROA	0,1	0,002	0,349	0,067

Source: Data analyzed using SmartPLS 4

Based on Table 2, the WCT variable has a mean value of 0.313, indicating that, in general, the company's working capital turnover efficiency remains

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relatively low. The minimum WCT value is -9.346, while the maximum value is 10.941, indicating that some companies are able to manage working capital very efficiently. The standard deviation of 1.548 indicates that the WCT data has a fairly high level of dispersion. The DAR variable has a mean value of 0.397, which means that approximately 39.7% of a company's assets are financed by debt. It has a mean value of 0.067, while the maximum value is 0.888. A standard deviation of 0.198 indicates relatively moderate variation in DAR across companies. The Size variable has a mean value of 15.699, with a minimum value of 11.888 and a maximum value of 19.122. A standard deviation of 1.553 indicates that company sizes in this study are quite diverse. Meanwhile, the ROA variable has a mean value of 0.10 or 10%, indicating that the sample companies are able to generate a profit of 10% of their total assets. A value of 0.002 indicates a very low level of profitability, while the maximum value is 0.349. A standard deviation of 0.067 indicates that the companies' profitability levels are relatively stable despite differences among them.

Convergent Validity Test

Convergent validity testing was conducted to evaluate the loading factor values. Table 3 presents the loading factor results.

Table 3
Outer Loading Convergent Validity Test

	Leverage	Working Capital Turnover	Profitability	Firm Size
DAR	1			
WCT		1		
ROA			1	
Size				1

Source: Data analyzed using SmartPLS 4

The results of the outer loading estimates are measured by the correlation between the indicator scores (instruments) and their constructs (variables). An indicator is considered valid if it has a correlation value above 0.70. The outer loading results shown in Table 3 indicate that all indicators for the variables WTC, DAR, SIZE, and ROA have factor loadings > 0.70, so all are considered valid. This indicates that all indicators successfully measure the correlation between the indicator scores and their constructs, thereby supporting the construct validity of the measurement.

Discriminant Validity Test



The discriminant validity test aims to ensure that each latent construct in the research model has distinct conceptual differences from one another. In this study, the test was conducted using a correlation approach between latent variables; a construct is considered to have discriminant validity if the correlation coefficient between constructs is below 0.90, indicating no issues or construct overlap, as shown in Table 4.

Table 4
Latent Variable Correlation Test Results Discriminant Validity

	Leverage	Working Capital Turnover	Profitability	Firm Size
Leverage	1	-0,156	-0,116	0,302
Working Capital Turnover	-0,156	1	-0,349	-0,041
Profitability	-0,116	-0,349	1	-0,255
Firm Size	0,302	-0,041	-0,255	1

Source: Data analyzed using SmartPLS 4

The results of the latent variable correlation test show that each construct has a correlation coefficient of > 0.90 with its own variable and < 0.90 with other variables, meaning that the correlation coefficients between variables do not overlap, and the construct is therefore considered valid.

Evaluation of the Inner Model

The inner model describes the relationship between latent variables and is evaluated to assess the strength and significance of that relationship. This evaluation includes R-Square and the significance of the relationship (hypothesis testing), as shown in Table 5.

Table 5
Latent Variable Correlation Test Results Discriminant Validity

VARIABLE	R-square adjusted
Profitability	0,191
Firm Size	0,082

Source: Data analyzed using SmartPLS 4



The results of the analysis shown in Table 5 yield an adjusted R-Square value of 0.191 for profitability, indicating that 19.1% of the variation in this variable can be explained by the independent variables, while the remaining 80.9% is explained by other variables outside the research model. The adjusted R-Square value of 0.082 for firm size indicates that 8.2% of the variation in this variable can be explained by the independent variables, while the remaining 91.8% can be explained by other factors outside the research model, suggesting that the model's explanatory power regarding profitability and firm size is relatively weak.

Table 6
Direct effect path coefficient test

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Working Capital Turnover -> Profitability	-0,374	-0,364	0,107	3,485	0,001
Working Capital Turnover -> Firm Size	0,007	0,010	0,063	0,109	0,457
Firm Size-> Profitability	-0,240	-0,239	0,062	3,840	0,003
Leverage -> Firm Size	0,303	0,303	0,057	5,363	0,001
Leverage -> Profitability	-0,102	-0,108	0,093	1,092	0,137

Source: Data analyzed using SmartPLS 4

The direct effect path coefficient test is used to measure the magnitude of the direct effect of an independent variable on a dependent variable in a structural equation model. The coefficient value indicates the direction of the relationship (positive or negative), while the T-statistic and P-value are used to determine the significance of that effect. If the P-value is < 0.05, the direct effect is considered statistically significant. This test is important for determining whether a variable has a direct contribution to another variable without going through a mediating variable.

Table 7

**Indirect effect path coefficient test**

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Working Capital Turnover -> Firm Size -> Profitability	-0,002	-0,002	0,015	0,107	0,458
Leverage -> Firm Size -> Profitability	-0,073	-0,073	0,027	2,723	0,003

Source: Data analyzed using SmartPLS 4

The path coefficient test for indirect effects is used to measure the magnitude of the indirect influence of an independent variable on a dependent variable through a mediating variable in a structural equation model. The coefficient value indicates the direction and strength of the indirect effect, while the T-statistic and P-value determine whether the mediating effect is statistically significant. If the P-value is < 0.05 , then the mediating variable is deemed to significantly bridge the relationship between the variables. This test is important for understanding the mechanism by which a variable influences another variable through a specific mediator in the research model.

The Effect of Working Capital Turnover on Profitability

The results of the test for Hypothesis 1 indicate that working capital turnover has a significant negative effect on profitability, with an Original Sample (O) value of -0.374, a T-statistic of 3.485, and a P-value of 0.001 (< 0.05); therefore, Hypothesis 1 is accepted. A negative coefficient indicates that as the level of working capital turnover increases, the company's profitability tends to decrease. Theoretically, this occurs because excessively high working capital turnover often reflects a relatively small amount of working capital compared to sales volume, causing the company to operate under tight liquidity conditions. Working capital turnover is a ratio that describes the efficiency of working capital utilization in generating sales Hidayat & Oktaviano (2024). Limited working capital can hinder operational smoothness, increase the risk of cash shortages, and restrict the company's flexibility in financing production and expansion activities, which ultimately reduces profits. Furthermore, the pressure to maintain a high turnover rate may lead to overly aggressive sales policies or suboptimal inventory

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management, thereby contributing to a decline in profit margins. These findings align with research Maulana & Nurwani (2022), which found that a high working capital turnover rate can negatively impact profitability as it indicates limited operational funds and increased risk of business disruptions.

The Effect of Working Capital Turnover on Firm Size

The results of the test for Hypothesis 2 indicate that working capital turnover does not have a significant effect on firm size, with an Original Sample (O) value of 0.007, a T-statistic of 0.109, and a P-value of 0.457 (>0.05); therefore, Hypothesis 2 is rejected. This indicates that high or low working capital turnover efficiency is not accompanied by significant changes in the company's total assets or operational scale. Conceptually, working capital turnover is a short-term operational efficiency indicator that focuses on how quickly current assets such as cash, accounts receivable, and inventory turn over in generating sales. Meanwhile, company size is generally proxied by total assets, which reflect the company's economic capacity and resource strength in the long term. The differing characteristics between these short-term and long-term variables may explain why they do not show a significant relationship. Changes in working capital efficiency do not automatically increase or decrease a company's total assets, as asset growth is more heavily influenced by strategic investment decisions, business expansion, acquisitions, financing structures, and long-term management policies. Furthermore, large companies do not necessarily have high working capital turnover rates, as large firms often hold substantial amounts of current assets, resulting in relatively lower turnover ratios. Conversely, small companies may have high working capital turnover due to their limited asset scale. This indicates that working capital turnover better reflects operational management efficiency rather than a company's ability to expand its asset scale. Therefore, factors such as growth strategies, access to financing, industry conditions, and investment policies play a more dominant role in determining company size compared to the working capital turnover ratio. This finding aligns with the research by Akhmad et al (2022), which reinforces the argument that operational efficiency is not always the primary determinant in the formation of firm scale; thus, the relationship between working capital turnover and firm size in this study was not statistically significant. Research by Aryani et al (2024) and the findings of Doğan (2020) indicate that larger firm size does not always lead to increased profits; in fact, it can negatively impact profitability due to inefficiencies and overinvestment.

The Effect of Firm Size on Profitability



The results of the test for Hypothesis 3 indicate that firm size has a significant negative effect on profitability, with an Original Sample (O) value of -0.240, a T-statistic of 3.840, and a P-value of 0.003 (< 0.05); therefore, Hypothesis 3 is accepted. This negative coefficient indicates that as company size increases, profitability tends to decrease. Empirically, these results suggest that an increase in total assets—which represents company size does not always correspond to an increase in the company's ability to generate profits. In practice, large-scale companies generally have more complex organizational structures, longer bureaucratic chains, and higher operational and administrative costs, which can lead to operational inefficiencies. Additionally, as a company grows larger, the potential for agency costs increases due to a wider separation between ownership and management, which can result in suboptimal decision-making and negatively impact asset return rates. Kiymaz's (2024) study indicates that working capital policy has indirect consequences for a company's asset structure and performance. Thus, firm size can act as a mediating variable in explaining the negative impact of working capital turnover on profitability. Large firms also tend to face overinvestment issues, where management engages in asset expansion that is not always productive, resulting in profits that do not match asset growth. This condition explains why an increase in firm size is actually associated with a decline in profitability in this study. The results of this study are consistent with the findings of Aryani et al (2024) and Doğan (2020), who state that firm size has a significant negative effect on profitability, as asset growth that is not balanced by management efficiency will reduce the rate of return obtained by the firm.

The Effect of Firm Size in Mediating the Relationship Between Working Capital Turnover and Profitability

The results of Hypothesis 4 testing indicate that Firm Size does not mediate the relationship between Working Capital Turnover and Profitability, with an Original Sample (O) value of -0.002, a T-statistic of 0.107, and a P-value of 0.458 (> 0.05); thus, the mediation hypothesis is rejected. These very small and insignificant coefficient values indicate that the indirect effect of Working Capital Turnover on Profitability through Firm Size has almost no statistical contribution. Methodologically, a variable can be said to mediate if the paths of influence from the independent variable to the mediator and from the mediator to the dependent variable are significant; however, in this study, Working Capital Turnover was not found to have a significant effect on Firm Size, so one of the main prerequisites for mediation was not met. Conceptually, Working Capital Turnover is a short-term operational efficiency ratio that describes the speed at which working capital

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turns over to generate sales, whereas Firm Size is generally proxied by total assets, which reflect the firm's capacity and scale in the long term. Changes in working capital efficiency do not directly affect the size of total assets, as firm size is more determined by investment policies, fixed asset expansion, financing structure, and other long-term strategic decisions. Therefore, although Working Capital Turnover directly influences Profitability, this influence does not occur through changes in firm size. In other words, Firm Size does not act as a mediating mechanism capable of explaining the relationship between Working Capital Turnover and Profitability in this study; thus, the expected mediating effect was not found to be significant. These results are inconsistent with Kiymaz's (2024) research, which indicates that working capital policies have indirect consequences for asset structure and firm performance. Thus, firm size may act as a mediating variable in explaining the negative effect of working capital turnover on profitability. This finding is supported by the research of Ramli & Yusnaini (2022), who found that leverage has a positive effect on firm asset growth. Additionally, a study by Thuc & Nguyen (2020) also indicates that access to debt financing contributes to an increase in firm scale through asset expansion.

The Effect of Leverage on Firm Size

The results of the test for Hypothesis 5 indicate that leverage has a significant positive effect on firm size, with an Original Sample (O) value of 0.303, a T-statistic of 5.363, and a P-value of 0.001 (< 0.05); thus, the hypothesis is accepted. This positive coefficient indicates that as a company's leverage ratio increases, its size tends to grow. Conceptually, leverage reflects the use of debt-financed funds to finance a company's assets. When a company increases its debt proportion, these additional funds are typically used for operational expansion, the purchase of fixed assets, increased production capacity, or business development, which ultimately increases total assets as a proxy for company size. Thus, increased leverage enables a company to expand the scale of its operations through additional external funding sources. Furthermore, companies with access to debt financing are typically viewed by creditors as having good credibility and prospects, making it easier for them to secure funds to expand their business activities. From a managerial perspective, the use of leverage can also serve as a growth strategy, as companies rely not only on their own capital but also utilize borrowed funds to accelerate expansion. Therefore, the significant positive relationship between leverage and firm size in this study indicates that increased debt financing contributes tangibly to asset growth and firm scale. These results align with the study by Ramli & Yusnaini (2022), which found that



leverage has a positive effect on a company's asset growth. Additionally, a study by Thuc & Nguyen (2020) also indicates that access to debt financing contributes to an increase in company scale through asset expansion. Research by Pratama & Suwarti (2021) indicates that firm size can weaken the effect of leverage on financial performance through increased operating costs.

The Effect of Firm Size in Mediating the Relationship Between Leverage and Profitability

The results of Hypothesis 7 testing indicate that Firm Size significantly and negatively mediates the relationship between Leverage and Profitability, with an Original Sample (O) value of -0.073, a T-statistic of 2.723, and a P-value of 0.004 (< 0.05); thus, Hypothesis 7 is accepted. The negative coefficient value in this indirect effect indicates that increased leverage will enlarge company size through the addition of assets; however, at the same time, this increase in size actually contributes to a decline in profitability. Conceptually, the use of debt allows a company to expand and increase total assets, thereby increasing firm size; however, asset growth financed by debt is also accompanied by increased interest expenses, operational complexity, and potential managerial inefficiencies. As a company grows larger, increasingly complex organizational structures and rising operational costs can suppress the return on assets, so that the profits generated are not commensurate with the firm's scale growth. Thus, leverage does not directly affect profitability significantly, but through an increase in firm size, leverage has a negative impact on profitability. These findings indicate that firm size acts as an intermediary mechanism that clarifies how debt-based expansion can lead to reduced efficiency and profitability. These results are consistent with the research by Pratama & Suwarti (2021), which shows that firm size can weaken the effect of leverage on financial performance through increased operating costs.

CONCLUSION

This study aims to analyze the effect of Working Capital Turnover and Leverage on Profitability, with Firm Size as a mediating variable. Based on the results of the analysis using the PLS-SEM method, it can be concluded that Working Capital Turnover has a significant negative effect on Profitability but does not have a significant effect on Firm Size. These results indicate that an increase in working capital turnover does not always lead to higher corporate profits and is not a determining factor in the size of a firm.

Furthermore, Leverage was found to have a significant positive effect on Firm Size, but no significant direct effect on Profitability. Meanwhile, Firm Size



had a significant negative effect on Profitability, indicating that an increase in a firm's assets is not always accompanied by a proportional increase in its ability to generate profits. The results of the mediation test show that Firm Size is unable to mediate the relationship between Working Capital Turnover and Profitability. However, Firm Size was found to significantly and negatively mediate the relationship between Leverage and Profitability. These findings indicate that the use of leverage can drive the growth of a firm's assets, but this increase in firm size has the potential to reduce profitability levels.

Overall, this study confirms that the relationship between financing structure and profitability is not always direct; rather, it can be influenced by indirect mechanisms through firm size. Therefore, companies need to pay attention to the effectiveness of working capital management and the optimal use of leverage so that corporate growth can be accompanied by increased profitability. Furthermore, the results of this study enrich the corporate finance literature by highlighting the importance of mediating variables in explaining the relationships between financial variables and firm performance.

REFERENCES

- Akhmad, D., Hanif Dwi, C., Fatmah, B., & Dwi Vina, R. (2022). Working Capital Turnover, Liquidity, Solvency and Firm Size Effect on Profitability. *Jurnal Manajemen Strategi Dan Aplikasi Bisnis (JMSAB)*, 5(1), 156–166. <https://doi.org/https://doi.org/10.36407/jmsab.v5i1.433>
- Amalia, A. N., & Khuzaini. (2021). PENGARUH UKURAN PERUSAHAAN , LEVERAGE DAN STRUKTUR MODAL TERHADAP KINERJA KEUANGAN. *Jurnal Ilmu Dan Riset Manajemen*, 10(5), 1–17. <https://jurnalmahasiswa.stiesia.ac.id/index.php/jirm/article/view/4025/4037>
- Aryani, P., Santoso, S. B., Hariyanto, E., & Kusbandiyah, A. (2024). Pengaruh Perputaran Modal , Leverage dan Likuiditas terhadap Profitabilitas dengan Ukuran Perusahaan sebagai Variabel Moderasi Perusahaan Yang Terdaftar Pada JII 70 Tahun 2020-2022. *Jurnal Ecogen*, 7(2), 205–219. <https://doi.org/http://dx.doi.org/10.24036/jmpe.v7i2.15835>
- Doğan, M. (2020). Institutional Ownership and Firm Value : A Study on the Bist Manufacturing Index Institutional Ownership and Firm Value : A Study on the Bist Manufacturing Index. *Ekonomika*, 99(2), 59–75. <https://doi.org/10.15388/Ekon.2020.2.4>
- Hidayat, T., & Oktaviano, B. (2024). *Rasio Leverage dan Aktivitas dalam*



- Mempengaruhi Profitabilitas Perusahaan Farmasi*. 7(1), 1069–1079.
- Jensen, M., & Meckling, W. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *The Economic Nature of the Firm: A Reader*, Third Edition, 283–303.
<https://doi.org/10.1017/CBO9780511817410.023>
- Kiyamaz, H., Haque, S., & Abir, A. (2024). Bursa Istanbul Review Working capital management and firm performance : A comparative analysis of developed and emerging economies. *Borsa Istanbul Review*, 24(3), 634–642.
<https://doi.org/10.1016/j.bir.2024.03.004>
- Maulana, M. A., & Nurwani. (2022). Pengaruh Perputaran Modal Kerja dan Struktur Modal Terhadap Profitabilitas Perusahaan yang Terdaftar di Jakarta Islamic Index (JII) Periode. *Riset & Jurnal Akuntansi*, 6, 2548–7507.
<https://doi.org/https://doi.org/10.33395/owner.v6i4.1121>
- Muhammad Riski Santoso, W. D. L. (2026). Pengaruh Struktur Modal, Leverage, Dan Ukuran Perusahaan Terhadap Kinerja Keuangan Dengan Likuiditas Sebagai Variabel Kontrol. *Community Engagement & Emergence Journal*, 7(1), 370–376. <https://doi.org/10.37385/ceej.v7i1.10051>
- Muthohharoh, N. (2021). Pengaruh Likuiditas , Multiplier Equity , Keputusan Investasi dan Kebijakan Dividen terhadap Profitabilitas dengan Ukuran Perusahaan sebagai Variabel Moderating. *Accounting and Finance Studies*, 1(3). <https://doi.org/10.47153/afs14.2502021>
- Ramli, D., & Yusnaini. (2022). Pengaruh Sales Growth , Debt To Equity Ratio , Total Assets Turnover terhadap Return On Assets pada Perusahaan Property dan Real Estate yang Terdaftar di Bursa Efek Indonesia 2018-2020. *Owner: Riset & Jurnal Akuntansi*, 6(1), 722–734.
<https://doi.org/https://doi.org/10.33395/owner.v6i1.647>
- Rifky Fathoni, S. (2021). Pengaruh Struktur Modal Terhadap Profitabilitas dengan Ukuran Perusahaan Sebagai Variabel Moderasi (Studi pada Perusahaan dalam Indeks JII Periode 2017-2019). *Jurnal Ilmiah Ekonomi Islam*, 7(03), 1347–1356. <https://doi.org/http://dx.doi.org/10.29040/jiei.v7i3.2761>
- Sabakodi, M. Y., & Andreas, H. H. (2024). Pengaruh Struktur Modal Terhadap Profitabilitas Perusahaan Manufaktur Tahun 2019-2022. *Owner: Riset & Jurnal Akuntansi*, 8(2017), 377–390.
<https://doi.org/https://doi.org/10.33395/owner.v8i1.1934>
- Sativani, M. A., Gede, L., & Dewi, K. (2024). Pengaruh Struktur Modal , Peluang Pertumbuhan , dan Produk Domestik Bruto terhadap Profitabilitas pada Perusahaan Pembiayaan yang Terdaftar di BEI Periode 2020-2022. *Vokasi : Jurnal Riset Akuntans*, 13(1), 57–69.



- Tara Dita Musi Anisa, A. F. (2024). JIMEA | Jurnal Ilmiah MEA (Manajemen , Ekonomi , dan Akuntansi). *JIMEA Jurnal Ilmiah MEA (Manajemen, Ekonomi, Dan Akuntansi)*, 8(1), 1992–2016.
- Thuc, T., & Nguyen, D. (2020). *AN EMPIRICAL STUDY ON THE IMPACT OF SUSTAINABILITY REPORTING ON FIRM VALUE*. 12(3), 119–135. <https://doi.org/https://doi.org/10.7441/joc.2020.03.07>
- Verdina, R. A., & Lestari, W. D. (2025). *The Effect Of Capital Structure , Company Size , Liquidity On Financial Performance With Agency Costs As A Mediation Variable Pengaruh Struktur Modal , Ukuran Perusahaan , Likuiditas Terhadap Kinerja Keuangan Dengan Biaya Agensi Sebagai Variabel Mediasi*. 6(6), 760–774.