

## The Impact of Firm Size on Firm Value: A Mediation Study of Profitability and Capital Structure

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### **Abstract**

#### **Keywords:**

*Company Size, Profitability, Capital Structure, Company Value*

*This study aims to examine the effect of Company Size on Firm Value and analyze the mediating role of Profitability and Capital Structure in companies listed in the IDX30 index during the 2021–2023 period. The indicator variables used for Company Size are SIZE, Firm Value using Price to Book Value (PBV), Profitability using Return on Assets (ROA), and Capital Structure using the Debt to Equity Ratio (DER) as the measurement indicator. The method used is panel data regression and the Sobel test with a Random Effects Model approach. The results show that company size has no significant effect on profitability (ROA) or capital structure (DER). However, company size is proven to have a significant negative effect on firm value (PBV). On the other hand, profitability has a positive but insignificant effect on firm value, while capital structure shows a significant positive effect on firm value. The results of the mediation test also confirm that neither profitability nor capital structure successfully mediates the relationship between company size and firm value significantly.*

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## INTRODUCTION

Throughout 2021 and 2023, global economic uncertainty intensified due to the pandemic, energy crisis, and prolonged supply chain disruptions, leading to sharp fluctuations in stock price indices such as the Jakarta Composite Index (JCI), reflecting changing investor perceptions of risk and growth prospects. The capital market, as an economic barometer, reflects the performance of listed companies, with company value being a primary focus for investors as it reflects the market's appreciation of potential profits, assets, and business sustainability. Indicators such as Price to Book Value (PBV) reflect the extent to which a stock price exceeds a company's book value. IDX30 data shows significant PBV fluctuations between companies and across periods, although large-scale fluctuations do not always guarantee market confidence. (Nasution et al., 2023; Bank Indonesia, 2023)

The value dynamics of large companies, such as those listed on the IDX30, are often influenced by fundamental factors. A high PBV indicates market confidence in business growth and sustainability, while fluctuations reflect instability caused by macroeconomic conditions and governance quality. Large companies are expected to leverage economies of scale for efficiency, but this phenomenon demonstrates that size does not automatically translate into value stability. This is evident in inconsistent PBV patterns, reflecting changing investor expectations regarding future performance. (Prasetya & Lastanti, 2023; Romansyah et al., 2021)

### **Research Problems**

The instability of PBV values in IDX30 companies indicates that company value is not only determined by external factors but is also influenced by agency conflicts between management and shareholders, where management's short-term goals often conflict with the long-term vision of shareholders, thereby reducing the effectiveness of strategic decisions. This conflict can undermine

the quality of capital structure and profit sharing policies, risking worsening market perceptions of company value. Profitability and capital structure are considered internal mechanisms to mitigate these conflicts, with profitability as a signal of profit efficiency and capital structure as a means of managing financial risk. (Susilowati & Mawardi, 2025; Putri & Nurfauziah, 2022)

Previous research has shown mixed results regarding the effect of company size on firm value. Some studies found a positive effect due to the ability to attract market trust, but this was inconsistent across sectors, with profitability (ROA) and capital structure (DER) potentially mediating this relationship. Profitability reflects the ability to generate profits, which strengthens investor image, while optimal capital structure improves capital cost efficiency. This inconsistency opens the opportunity to explore the mediating role of large companies on the IDX30 (Hartanti et al., 2025; Lintang et al., 2024).

Profitability and capital structure are believed to mediate the effect of firm size on value, but empirical findings indicate that this mediation is not always significant, especially in the context of the IDX30, where large scale does not guarantee optimal internal factors. This is exacerbated by fluctuations in PBV, which reflect agency conflict tensions and economic uncertainty. This issue emphasizes the need for in-depth analysis of Indonesian blue-chip companies. (Hakim & Hindasah, 2025; Dhiana et al., 2024)

### **Purpose, Urgency, and Novelty of the Research**

This study aims to examine the effect of company size on firm value and analyze the mediating role of profitability (ROA) and capital structure (DER) in IDX30 companies for the 2021-2023 period using panel data regression and the Sobel test. The urgency of this research lies in the practical need for managers and investors to understand value dynamics amid post-pandemic economic uncertainty, where fluctuations in IDX30 PBV influence investment decisions and financial strategies. The novelty of this research is its focus on the simultaneous dual mediation of ROA and DER in a sample of non-financial blue-chip companies in the IDX30, filling the gap of previous empirical inconsistencies with current data and a random effects model. (Susanto & Indrabudiman, 2023; Bennany & Susilo, 2024)

## **METHODS**

This research study adopted a quantitative approach with an associative design. This method was chosen because the researchers wanted to identify causal relationships between the variables studied, particularly firm size, and firm value, and analyze the role of profitability and capital structure as mediating variables in this relationship. The research subjects were companies listed on the IDX30 index during the 2021-2023 period.

The type of data used is quantitative secondary data, which is obtained from annual financial reports and company annual reports officially published by the Indonesia Stock Exchange (BEI) ([www.idx.co.id](http://www.idx.co.id)) and the official website of each company. The population in this study were all companies listed in the IDX30 Index during the 2021-2023 period, totaling 48 companies. Sample selection was carried out using a purposive sampling technique, namely a sampling technique based on certain criteria determined by the researcher to meet research needs and ensure the quality of data that can be analyzed. The criteria include: (1) Companies that are consistently included in the IDX30 index during the 2021-2023 period (for 6 periods). (2) Annual financial reports have been fully audited and published openly and are publicly accessible. (3) Have sufficient data to calculate total assets, total debt, equity, net profit, year-end share price, and number of shares outstanding. (4) Included in the non-financial industry sector.

The sample consists of companies consistently listed in the IDX30 index and not included in the financial sector on the Indonesia Stock Exchange during the 2021–2023 period. The total sample is 14 companies  $\times$  3 years = 42 observations. The list of 14 selected companies is presented in Table 1 as the basis for the company-year observations used in this study.

**Table 1. Research Sample**

No.	Company Code	Company name
1	ADRO	PT. Adaro Energy Indonesia Tbk.
2	ANTM	PT. Aneka Tambang Tbk.
3	ASII	PT. Astra International Tbk.
4	CPIN	PT. Charoen Pokphand Indonesia Tbk
5	INDF	PT. Indofood Sukses Makmur Tbk.
6	KLBF	PT. Kalbe Farma Tbk.
7	MDKA	PT. Merdeka Copper Gold Tbk.
8	PGAS	PT. Perusahaan Gas Negara Tbk.
9	PTBA	PT. Bukit Asam Tbk.
10	SMGR	PT. Semen Indonesia (Persero) Tbk.
11	TLKM	PT. Telkom Indonesia (Persero) Tbk.
12	TWO	PT. Sarana Menara Nusantara Tbk.
13	UNTR	PT. United Tractors Tbk.
14	UNVR	PT. Unilever Indonesia Tbk.

Source: Processed Data (2025)

This study focuses on four interrelated main variables. The independent variable analyzed is company size, which reflects the total assets owned by the company. As a dependent variable, company value is measured using the Price to Book Value (PBV) ratio, which is the comparison between the stock market price and the book value per share. Furthermore, two mediating variables are included in the model. The first mediating variable is profitability, with the indicator used being Return on Assets (ROA), which describes the company's effectiveness in managing its assets to generate profits. The second mediating variable is capital structure, with the indicator used being Debt to Equity Ratio (DER), which shows the extent to which the company's capital structure is dominated by debt compared to equity.

In analyzing the data, this study used panel data analysis, which is a combination of time series data and cross-sectional data covering companies in the IDX30 index during the period 2021 to 2024. The selection of this method is based on its use over a period of several years and involving many companies. Time series data was taken for 3 years, from 2021 to 2023. Meanwhile, cross-sector data was obtained from entities in the study sample. Panel data regression analysis was conducted to examine the influence of independent variables and the role of mediating variables on the dependent variable. This data processing used Eviews 13 with regression model analysis techniques, hypothesis testing, and the Sobel test using two main test models to determine the series to be tested in this study. The following test models are used to determine the series of tests to be used:

### Model 1 :

$$ROA = \alpha + \beta_1(SIZE) + \varepsilon$$

$$PBV = \alpha + \beta_1(SIZE) + \beta_2(ROA) + \varepsilon$$

### Model 2 :

$$DER = \alpha + \beta_1(SIZE) + \varepsilon$$

$$PBV = \alpha + \beta_1(SIZE) + \beta_2(DER) + \varepsilon$$

### Information :

ROA : Mediating Variable (ROA Disclosure)

DER : Mediating Variable (DER Disclosure)

$\alpha$  : Regression Constant

$\beta$  : Regression Coefficient

SIZE : Independent Variable

PBV : Dependent Variable

$\varepsilon$  : Error

## RESULTS

### MODEL SELECTION TEST

In this research data, three panel data regression models were applied, namely CEM, FEM, and REM to determine the best model. Two models were tested: model (1) testing the effect of ROA SIZE on PBV and model (2) testing the effect of DER SIZE on PBV.

### UJI CHOW

This test is used in selecting the best panel model between *Common Effect Model* (CEM) and Fixed Effect Model (FEM). This test compares the two models using their p-values, or rather, their probabilities. If the p-value is  $>0.05$ , CEM is more appropriate because the individual effects are insignificant. If the p-value is  $<0.05$ , FEM is recommended because the individual effects are significant and need to be accounted for.

**Table 2. Chow Test Results for Model 1 and Model 2**

Redundant Fixed Effect Test			
Model 1			
Effects Test	Statistics	df	Prob.
Cross-section F	21.130232	(13.27)	0.0000
Cross-section Chi-square	101.370072	13	0.0000
Effects Test	Statistics	df	Prob.
Cross-section F	99.419077	(13.26)	0.0000
Cross-section Chi-square	164.896789	13	0.0000
Model 2			
Effects Test	Statistics	df	Prob.

Cross-section F	66.766501	(13.27)	0.0000
Cross-section Chi-square	147.039782	13	0.0000
Effects Test	Statistics	df	Prob.
Cross-section F	85.851678	(13.26)	0.0000
Cross-section Chi-square	158.865115	13	0.0000

Source: Eviews 13 output (Data processed by the author, 2025)

Based on the results from Table 2, the probability for both models is 0.0000 ( $p < 0.05$ ). Therefore, the selected model is the Fixed Effect Model (REM).

### HAUSMAN TEST

The Hausman test helps researchers select a regression model after selecting the FEM model from the Chow test. This test compares the efficiency of the two models. The criteria for this Hausman test are quite simple: if the p-value is  $>0.05$ , then the Random Effects Model (REM) is more appropriate. Conversely, if the p-value is  $<0.05$ , then the Fixed Effects Model (FEM) is recommended.

**Table 3. Results of Hausman Test Model 1 and Model 2**

Correlated Random Effect – Hausman Test				
Source: 13 output processed author,	Model 1			
	Test Summary	Chi-Sq. Statistic	Chi-Sq. df	Prob.
	Random cross-section	1.690890	1	0.1935
	Test Summary	Chi-Sq. Statistic	Chi-Sq. df	Prob.
	Random cross-section	4.712651	2	0.0948
	Model 2			
	Test Summary	Chi-Sq. Statistic	Chi-Sq. df	Prob.
	Random cross-section	0.975652	1	0.3233
	Test Summary	Chi-Sq. Statistic	Chi-Sq. df	Prob.
	Random cross-section	4.374369	2	0.1122

Eviews  
(Data  
by the  
2025)

Based on the Hausman Test table, the probability values for both models are greater ( $>0.05$ ), indicating that the Random Effects Model (REM) was selected. Therefore, the model testing continued with the Lagrange Multiplier.

### LAGRANGE MULTIPLIER TEST

The Lagrange Multiplier test helps researchers select a regression model after selecting the REM model from the Hausman test. This test compares the efficiency of the two models. The criteria for this Lagrange multiplier test are quite simple: if the p-value is  $>0.05$ , then the Common Effects Model (CEM) is more appropriate. Conversely, if the p-value is  $<0.05$ , then the Random Effects Model (REM) is recommended.

**Table 4. Results of Lagrange Multiplier Test for Model 1 and Model 2**

<b>Lagrangre Multiplier Tests for Random Effects</b>							
<b>Model 1</b>				<b>Model 2</b>			
Hypothesis Test				Hypothesis Test			
Breusch-Pagan	Cross-section	Time	Both	Breusch-Pagan	Cross-section	Time	Both
	35.50585	1.532115	37.03797		37.49239	1.321818	38.81421
	(0.0000)	(0.2158)	(0.0000)		(0.0000)	(0.2503)	(0.0000)
Hypothesis Test				Hypothesis Test			
Breusch-Pagan	Cross-section	Time	Both	Breusch-Pagan	Cross-section	Time	Both
	30.36078	0.856032	31.21681		37.77713	1.605446	39.38258
	(0.0000)	(0.3549)	(0.0000)		(0.0000)	(0.2051)	(0.0000)

Source: Eviews 13 output (Data processed by the author, 2025)

Based on the table of the Lagrange multiplier test, the results of the Breusch-Pagan test, shown through the p-value (probability) for both models, are 0.0000, which is smaller than the significance level (0.05). Therefore, the hypothesis( $H_0$ ) is rejected. Therefore, it can be concluded that the most appropriate panel regression model is the Random Effect Model (REM) because it shows indications of individual variation between entities that are more appropriately modeled with random components.

## PANEL DATA REGRESSION ANALYSIS

Both regression models in this study used the Random Effects Model (RAM) as the best model for testing the hypotheses. Before analyzing the regression models, they must be ensured to be free from violations of classical assumptions. Multiple linear regression is used to model the relationship between the dependent variable and various independent variables. The purpose of this analysis is to determine whether there is a significant impact between the dependent variable and the independent variables. The results of the Multiple Linear Regression Analysis (RMA) with REM for models 1 and 2 are presented in the following table:

**Table 5. Linear Regression Analysis Results**

<b>Model 1</b>					<b>Model 2</b>			
<b>Dependent Variable: ROA</b>					<b>Dependent Variable: DER</b>			
Variabl e	Coefficien t	Std. Error	t- Statistic	Prob.	Coefficien t	Std. Error	t- Statistic	Prob.
C	22.20162	53.27255	0.41675	0.679	1.604343	5.230621	0.30672	0.760
SIZE	-0.353431	1.664462	0.212339	0.832	-0.015539	0.163287	0.095166	0.924
<b>Dependent Variable: PBV</b>					<b>Dependent Variable: PBV</b>			
Variabl e	Coefficien t	Std. Error	t- Statistic	Prob.	Coefficien t	Std. Error	t- Statistic	Prob.

C	138.9015	30.0879 2	4.61652 0	0.000 0	134.6072	29.7155 4	4.52986 1	0.000 1
SIZE	-4.242172	0.94071 9	- 4.50949 9	0.000 1	-4.135457	0.92681 7	- 4.46199 9	0.000 1
ROA	0.141352	0.07988 5	1.76943 8	0.084 6	2.187111	0.90927 5	2.40533 5	0.021 0

Source: Eviews 13 output (Data processed by the author, 2025)

Based on the test results listed in Table 5, it shows that the multiple linear regression equation used in this study is as follows:

**Model 1 :**

$$ROA = 22.20162 - 0.353431(SIZE) + \varepsilon$$

The regression coefficient of -0.353431 indicates that increasing company size (SIZE) tends to decrease the level of profitability as measured by Return on Assets (ROA). This indicates that larger companies may face challenges in managing their asset efficiency, in accordance with the concept of diseconomies of scale. However, the probability value (p-value) of 0.8329 (> 0.05) indicates that the effect is not statistically significant. Thus, partially, company size is not proven to have a significant effect on Return on Assets (ROA) profitability, although the direction of the negative relationship is in line with the economic theory that large companies tend to experience decreased operational efficiency.

$$PBV = 138.9015 - 4.242172(SIZE) + 0.141352(ROA) + \varepsilon$$

From the equation and table, it can be seen that the effect of company size (SIZE) on company value (PBV) is negative with a coefficient of -4.242172. However, in contrast, profitability (ROA) has a positive coefficient of 0.141352, reflecting that the more efficient a company is in generating profits from its assets, the greater the market appreciation of the company. This supports signaling theory, where high profitability provides a positive signal to investors regarding the company's future prospects, thereby increasing its valuation in the market. Although size has a significant negative effect on PBV and ROA shows a positive relationship with PBV, the effect of ROA is not statistically strong enough to qualify as a mediator. Based on Baron and Kenny's causal steps approach, the probability value (p-value) of 0.0846 (> 0.05) indicates that the effect is not statistically significant and therefore does not fulfill one of the main requirements for mediation.

**Model 2 :**

$$DER = 1.604343 - 0.015539(SIZE) + \varepsilon$$

The regression coefficient of -0.015539 on the SIZE variable indicates a negative relationship between company size and capital structure as measured by the Debt to Equity Ratio (DER). Theoretically, this reflects that larger companies tend to have a lower dependence on debt-

based financing, as larger companies generally have easier access to internal funding and a better credit reputation. The probability p-value of 0.9247 ( $> 0.05$ ) indicates that the effect is not statistically significant because the probability value exceeds the standard. Thus, partially, company size is not proven to have a significant effect on capital structure (DER), so it can be said that company size is not a significant determinant of the high or low debt to equity ratio of a company.

$$PBV = 134.6072 - 4.135457(SIZE) + 2.187111(DER) + \varepsilon$$

From the equation and table, it can be seen that the effect of company size (SIZE) on company value (PBV) is negative with a coefficient of -4.135457. However, in contrast, capital structure (DER) has a positive coefficient of 2.187111, reflecting that companies that use more debt in their financing structure tend to have higher market value. Within the framework of trade-off theory, optimal use of debt can provide tax benefits and encourage managerial discipline, thereby increasing investor confidence and ultimately increasing company value. Although size has a significant negative effect on PBV and DER shows a positive relationship direction to PBV, with a probability value (p-value) of 0.0210 indicating that the relationship is statistically significant because the p-value ( $< 0.05$ ). This means that there is sufficient evidence to conclude that capital structure has a real effect on company value, and this relationship does not occur by chance, but is consistently proven in the data. This shows that capital structure with the Debt to Equity Ratio (DER) indicator can mediate the relationship between the influence of company size (SIZE) on company value (PBV).

### F TEST (Simultaneous)

The F-test is used to assess the simultaneous influence of independent variables on dependent variables. This result indicates how well the independent variables can explain the dependent variable.

**Table 6. F Test of Model 1 and Model 2**

<b>Model 1</b>	
F-statistic	0.044322
Prob(F-statistic)	0.834324
F-statistic	10.37313
Prob(F-statistic)	0.000244
<b>Model 2</b>	
F-statistic	0.009096
Prob(F-statistic)	0.924636
F-statistic	12.06128
Prob(F-statistic)	0.000084

Source :Eviews 13 Output (Data processed by the author, 2025)

In model 1 table 1, based on the results of the F-statistic test, the F value is obtained at 0.044322 with a probability (p-value) of 0.834324. This probability value is far above the conventional significance threshold, which is 0.05, so it can be concluded that the simultaneous regression model is not significant. Meanwhile, in table 2, the results of the F test on the regression



model involving company size (SIZE) and profitability (ROA) in explaining the variability of company value (PBV), obtained an F-statistic value of 10.37313 with a probability value (p-value) of 0.000244. Because the p-value ( $<0.05$ ), it can be statistically concluded that the simultaneous regression model is significant. This means that together the SIZE and ROA variables are able to explain variations in PBV significantly at the 95% confidence level.

For model 2 table 1, the results of the simultaneous test or F test show that the F-statistic value is 0.009096, with a probability value (p-value) of 0.924636. The p-value ( $>0.05$ ), which means that statistically there is not enough evidence to state that the company size variable (SIZE) has a significant influence on the capital structure (DER) as a whole. Meanwhile, there is table 2, Based on the results of the F test obtained with an F-statistic value of 12.06128 and a significance level of 0.000084 ( $p < 0.05$ ), it can be concluded that the regression model that tests the effect of company size (SIZE) on company value with capital structure (DER) as a mediating variable is simultaneously significant. This shows that together the independent variables and mediating variables have a meaningful contribution in explaining variations in company value.

### T-TEST (Partial)

The t-test is conducted to investigate whether the independent variables, either individually or collectively, have a significant influence on the dependent variable. The findings of the test and its analysis will be presented in detail in the following sections:

**Table 7. T-Test Results for Model 1 and Model 2**

<b>Model 1</b>				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	22.20162	53.27255	0.416755	0.6791
SIZE	-0.353431	1.664462	-0.212339	0.8329
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	138.9015	30.08792	4.616520	0.0000
SIZE	-4.242172	0.940719	-4.509499	0.0001
ROA	0.141352	0.079885	1.769438	0.0846
<b>Model 2</b>				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.604343	5.230621	0.306721	0.7606
SIZE	-0.015539	0.163287	-0.095166	0.9247
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	134.6072	29.71554	4.529861	0.0001
SIZE	-4.135457	0.926817	-4.461999	0.0001
DER	2.187111	0.909275	2.405335	0.0210

Source :Eviews 13

processed by the author, 2025)

Output (Data

Based on the results of the T-test in model 1 table 1, the coefficient value of the company size variable (SIZE) is -0.353431 with a significance value of 0.8329 ( $p > 0.05$ ). From this value, it can be concluded that  $H_0$  1 is accepted and  $H_a$  1 is rejected. This means that the SIZE variable indicates that company size does not significantly affect profitability (ROA) in IDX30 companies listed on the IDX for the 2021-2023 period. Meanwhile, table 2 shows that the company size

variable (SIZE) has a coefficient of -4.242172 with a significance value of 0.0001 ( $p < 0.05$ ). From this value, it can be concluded that H0 5 is rejected and Ha 5 is accepted. These results indicate that company size has a significant negative effect on company value, and the profitability variable (ROA) shows a positive coefficient of 0.141352 with a significance level of 0.0846 ( $p > 0.05$ ). From these values, it can be concluded that H0 3 is rejected and Ha 3 is accepted. These results indicate that profitability (ROA) has a positive but insignificant effect on company value.

Based on the results of the T-test in model 2 table 1, the coefficient value of the company size variable (SIZE) is -0.015539 with a significance value of 0.9247 ( $p > 0.05$ ). From this value, it can be concluded that H0 2 is accepted and Ha 2 is rejected. This means that the SIZE variable indicates that company size does not have a significant effect on capital structure (DER) in IDX30 companies listed on the IDX for the 2021-2023 period. Meanwhile, table 2 shows that the company size variable (SIZE) has a coefficient of -4.135457 with a significance value of 0.0001 ( $p < 0.05$ ). From this value, it can be concluded that H0 is rejected and Ha is accepted. These results indicate that company size has a significant negative effect on company value, and the capital structure variable (DER) shows a positive coefficient of 2.187111 with a significance level of 0.0210 ( $p < 0.05$ ). From this value, it can be concluded that H0 4 is accepted and Ha 4 is rejected. These results indicate that capital structure (DER) has a significant positive effect on company value.

## DETERMINATION COEFFICIENT TEST ( $R^2$ )

The coefficient of determination ( $R^2$ ) indicates how strong the relationship is between the independent and dependent variables in a regression model. A higher  $R^2$  value indicates that the model can better explain the variation in the dependent variable.

**Table 8. Coefficient of Determination ( $R^2$ )**

<b>Model 1</b>	
R-squared	0.001107
Adjusted R-squared	-0.023865
R-squared	0.347240
Adjusted R-squared	0.313765
<b>Model 2</b>	
R-squared	0.000226
Adjusted R-squared	-0.024768
R-squared	0.382154
Adjusted R-squared	0.350470

Source :Eviews 13

processed by the author, 2025)

Output (Data

Based on the results of the coefficient of determination test in model 1 (table 1), an adjusted R-squared value of -0.023865 was obtained. A negative adjusted R-squared value indicates that the addition of independent variables to the model does not improve the model's ability to explain variations in the dependent variable, but rather reduces the quality of the regression model used. Meanwhile, in table 2, the results of the coefficient of determination test obtained an adjusted

R-squared value of 0.313765 or 31.3765%. This value indicates that the independent variable of company size and the mediating variable of profitability (ROA) together are able to explain variations in company value (PBV). The remaining 65.28% of the variation in company value is explained by other variables outside this research model.

Based on the results of the determination coefficient test in model 2 table 1, the adjusted R-squared obtained is -0.024768. A negative adjusted R-squared value indicates that the addition of independent variables to the model does not improve the model's ability to explain variations in the dependent variable, but rather reduces the quality of the regression model used. Meanwhile, in Table 2, the results of the coefficient of determination test obtained an adjusted R-squared value of 0.350470 or 35.0470%. This value indicates that the independent variable of company size and the mediating variable of capital structure (DER) together explain variations in firm value (PBV). The remaining 65.28% of the variation in firm value is explained by other variables outside this research model.

## SOBEL TEST

This study utilizes intervening variables, so it will see the influence of Profitability (ROA) and Capital Structure (DER) variables among Company Size (SIZE) on Company Value (PBV).

**Table 9. Sobel Test Results**

	z-count	t-table
SIZEROA→→ PBV	-0.20	2.02
SIZEDERPVB→→	-0.12	2.02

Source: Researcher processed data (2025)

The z-value for ROA obtained was  $0.20 < 0.05$ . Thus, it can be stated that the SIZE variable has no effect on PBV through the ROA variable or indirectly the ROA variable is not successful in mediating the influence of the SIZE variable on PBV.

The z-value for DER obtained was  $0.12 < 0.05$ . Thus, it can be stated that the SIZE variable does not affect PBV through the DER variable or indirectly the DER variable does not succeed in mediating the influence of the SIZE variable on PBV.

## DISCUSSION

### The Effect of Company Size on Profitability

The results of statistical tests show that company size (SIZE) does not have a significant effect on profitability (ROA). This is in line with research. Suryadinata et al., (2022) Firm size has no significant partial effect on profitability (ROA) in manufacturing companies listed on the Indonesia Stock Exchange. In this study, although firm size is assumed to provide competitive advantages, such as scale efficiency and broader access to funding, empirical results actually indicate that other internal factors, such as managerial efficiency, cost structure, or operational strategy, play a greater role in determining profitability levels.

### The Influence of Company Size on Capital Structure

The results of statistical tests show that company size (SIZE) does not significantly influence capital structure (DER). This is in line with research conducted by Ginting et al., (2024) who studied companies in the consumer goods industry sector on the Indonesia Stock Exchange and found that company size did not have a significant influence on capital structure. Similar research by Chandra & Setyawan, (2023) also concluded that in the context of the banking industry, company size does not show a significant relationship

with DER, thus implying that funding decisions are more influenced by other variables such as liquidity, profitability, or financial risk.

### **The Influence of Profitability on Company Value**

Statistical test results show that profitability (ROA) does not significantly influence company value (PBV). This is in line with research.Oktaviani & Dwi, (2023)entitled "Causality Analysis of Profitability and CSR on PBV in Commercial Banks Listed on the IDX 2016–2020". They found that partially, ROA has no significant effect on firm value in the banking sector ( $p > 0.05$ ), although simultaneously variables such as ROA, ROE, NPM, and CSR show a joint effect on PBV. This finding indicates that, although the return on assets reflects the efficiency of asset use in generating profits, this variable does not succeed in explaining firm value directly in the tested model.

### **The Influence of Capital Structure on Company Value**

Statistical test results show that capital structure (DER) has a significant effect on company value (PBV). This is in line with research.Siahaan & Putra, (2024)in the Economics and Business Journal, which found that capital structure has a significant positive effect on firm value in companies listed on the Indonesia Stock Exchange, supporting an optimal leverage strategy for increasing firm value. Furthermore, the studyHadi & Nuraini, (2024)Post-pandemic data on Islamic companies also show that DER has a significant effect on PBV, albeit in a negative direction. This is statistically consistent and suggests that prudent debt management significantly impacts market valuation. This suggests that to the extent a company uses debt in an optimal proportion to equity, it will enhance the market's perception of the company's value, as reflected in the PBV indicator.

### **The Influence of Company Size on Company Value**

Statistical test results show that company size (SIZE) has a significant effect on company value (PBV). This is in line with research.Boenyamin & Santioso, (2023)in the International Journal of Application on Economics and Business, which analyzed banking companies listed on the IDX during 2018–2020. They found that firm size significantly and positively affected PBV, while other variables such as profitability and capital structure were insignificant. Furthermore, a study byChabachib et al., (2019)published in the International Journal of Financial Research shows that in a multiple regression model, firm size and ROA both have a significant positive influence on company value.

### **The Mediating Role of Profitability in the Influence of Firm Size on Firm Value**

The results of statistical testing using the Sobel test indicate that the SIZE variable does not affect PBV through the ROA variable, or indirectly, the ROA variable does not mediate the influence of the SIZE variable on PBV. This is in line with research studies byCeunfin et al., (2024)In the industrial sector, the Sobel test was applied, which concluded that Return on Assets (ROA) failed to mediate the relationship between firm size and firm value. This strengthens the argument that the effectiveness of the ROA mediation pathway is limited. Although SIZE and ROA have a positive effect on performance, their effectiveness does not translate into increased firm valuation through the mediation mechanism.

### **The Mediating Role of Capital Structure in the Influence of Company Size on Company Value**

The results of statistical testing using the Sobel test indicate that the SIZE variable does not affect PBV through the DER variable, or indirectly, the DER variable does not mediate the influence of the SIZE variable on PBV. This is in line with research studies.Masyaili, (2022), which analyzed firm size and firm value, with capital structure as a mediator. They found that, although capital structure plays a mediating role, firm size does not have an indirect effect on firm value through capital structure. This indicates that capital structure does not act as a mediating mechanism for the influence of size on market valuation in the model tested.

## **CONCLUSION**

This study reveals important findings regarding the effect of firm size on firm value and the mediating role of profitability and capital structure in non-financial IDX30 companies during

the 2021-2023 period. The results show that firm size has a significant negative effect on firm value, indicating that large firms may face challenges in maintaining market valuation due to inefficiencies or agency conflicts despite their scale advantages. Profitability, measured by Return on Assets (ROA), has a positive effect on firm value but is not statistically significant, while capital structure, indicated by the Debt to Equity Ratio (DER), significantly mediates the relationship between firm size and firm value. This suggests that optimal debt management can increase investor confidence and firm valuation. However, the Sobel test does not support the mediating effect of profitability or capital structure, highlighting the complex internal dynamics and external economic uncertainty in the Indonesian market during times of turbulence.

This study is limited by a relatively small sample size of 14 IDX30 companies over three years, which may limit the generalizability of the results to other sectors or time periods. Furthermore, the use of secondary financial data and quantitative panel regression models limits the exploration of qualitative nuances such as governance practices and managerial decision-making processes. Future research could be expanded with a longer time horizon, a larger and more diverse sample, and a mixed approach to gain deeper insights into agency conflicts and market perceptions. Practically, corporate managers are advised to prioritize improving capital structure strategies to capitalize on the benefits of debt while maintaining operational efficiency to increase market valuation. Investors can benefit from the understanding that company size alone is not a sufficient indicator of company value, necessitating comprehensive financial analysis, including profitability and leverage ratios, in investment decisions.

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