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THE EFFECT OF PER, DER, AND CR ON FIRM VALUE: THE MODERATING ROLE OF FIRM SIZE IN INDONESIAN INDUSTRIAL SECTOR COMPANIES

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Abstract

This study aims to analyze the effect of Price Earning Ratio (PER), Debt to Equity Ratio (DER), and Current Ratio (CR) on firm value, with firm size as a moderating variable, in industrial sector companies listed on the Indonesia Stock Exchange during the 2022–2024 period. This study employed a quantitative approach with an associative method. The data used were secondary data obtained from companies' annual financial reports. The sample was determined using purposive sampling, resulting in 44 companies with a total of 132 firm-year observations. The data were analyzed using Moderated Regression Analysis (MRA), supported by classical assumption tests, correlation coefficient analysis, coefficient of determination analysis, simultaneous testing, and partial testing. The results of the moderation model show that firm size has a positive and significant effect on firm value, with a significance value of 0.043. Meanwhile, PER, DER, and CR do not have a significant effect on firm value after firm size and the interaction variables are included in the model. The moderation test results indicate that firm size is unable to moderate the effect of PER, DER, and CR on firm value, as all interaction variables have significance values greater than 0.05. Although PER has a positive and significant effect on firm value in the first model, this effect is no longer significant in the moderation model. The coefficient of determination in the moderation model is 12.1%, indicating that the model's ability to explain variations in firm value remains limited. These findings indicate that firm size is a more dominant factor in explaining firm value than PER, DER, and CR in the moderation model.

Keywords: *Firm Value, Price to Book Value, Price Earning Ratio, Debt to Equity Ratio, Current Ratio, Firm Size*

1. INTRODUCTION

Firm value is one of the indicators that reflects investors' perceptions of a company's performance and future prospects. A high firm value indicates market confidence in the company's ability to generate profits and create sustainable growth. Therefore, firm value becomes a major objective for management because it is closely related to the improvement of shareholders' welfare. According to Araffi (2019), information reflected in financial ratios is one of the bases used by investors to assess a company's condition in the capital market. Desmond (2020) also states that firm value is influenced by various financial information available to investors in the investment decision-making process.

In industrial sector companies listed on the Indonesia Stock Exchange, companies' financial conditions show diverse characteristics. This variation is reflected in differences in market ratios, solvency ratios, and liquidity ratios owned by each company. Fitriati (2021)

explains that these three ratios are indicators often used to assess company performance and its relationship with firm value. Differences in financial conditions among companies indicate that the factors influencing firm value remain a relevant issue to be examined, particularly in the industrial sector, which has an important contribution to the national economy.

Several previous studies have shown that the effect of financial ratios on firm value still produces varied findings. In the Price Earning Ratio (PER) variable, the studies conducted by Hutapea et al. (2021) and Nurindrayani and Indrati (2022) show different findings regarding the effect of PER on firm value. Inconsistencies in research findings are also found in the Debt to Equity Ratio (DER) variable, as shown by the studies of Atrianingsih and Nyale (2022), Listyawati and Kristiana (2021), and Savira and Ferdian (2024). In addition, studies on Current Ratio (CR) conducted by Utami and Welas (2019) and Febrian et al. (2022) also show different findings regarding the relationship between CR and firm value. These differences indicate that the relationship between financial ratios and firm value remains an empirical debate that requires further testing.

In addition to financial ratios, firm size is also often used as a factor that can influence firm value. Larger companies are generally considered to have stronger resources, broader access to financing, and better ability to face business risks. However, studies on the role of firm size as a moderating variable still show inconsistent results. Anjani (2024) found that firm size is able to moderate the relationship between DER and firm value, while Desi and Baviga (2024) found that firm size is unable to moderate the effect of Current Ratio on firm value. These different findings show that the effectiveness of firm size in strengthening or weakening the relationship between financial ratios and firm value still needs to be further examined.

The industrial sector was selected because its operations require substantial fixed assets, working capital, inventories, and external financing. These characteristics make PER, DER, and CR relevant for assessing firm value, particularly because industrial companies are exposed to changes in production costs, raw material prices, and market demand. The 2022–2024 period represents a post-pandemic adjustment phase, during which industrial companies faced changing demand conditions, operating costs, and financing pressures. This study contributes by specifically examining the simultaneous effect of PER, DER, and CR on firm value in industrial sector companies and testing whether firm size moderates these relationships. This focus distinguishes the study from previous research that generally examined different sectors or treated firm size only as an independent variable.

Based on the explanation above, there is still an empirical gap regarding the effect of Price Earning Ratio (PER), Debt to Equity Ratio (DER), and Current Ratio (CR) on firm value, as well as the role of firm size as a moderating variable. Therefore, this study aims to analyze the effect of PER, DER, and CR on firm value in industrial sector companies listed on the Indonesia Stock Exchange during the 2022–2024 period. In addition, this study also examines the ability of firm size to moderate the relationship between PER, DER, and CR and firm value.

2. RESEARCH METHOD

This study used a quantitative approach with an associative method to analyze the effect of Price Earning Ratio (PER), Debt to Equity Ratio (DER), and Current Ratio (CR)

on firm value, with firm size as a moderating variable. The data used were secondary data in the form of annual financial reports of industrial sector companies listed on the Indonesia Stock Exchange during the 2022–2024 period. Data collection was carried out through documentation techniques by utilizing financial reports published by the companies and the Indonesia Stock Exchange. The research population consisted of 65 industrial sector companies, while the sample was determined using purposive sampling based on the criteria of financial report completeness and the availability of research data, resulting in 44 companies as the research sample. Purposive sampling was used to obtain samples that were in accordance with the objectives of the study (Sugiyono, 2020).

The research variables consisted of Price Earning Ratio (PER), measured by comparing stock price to earnings per share (Budiman, 2021). Debt to Equity Ratio (DER) was measured by comparing total debt to total equity (Kasmir, 2017). Current Ratio (CR) was measured by comparing current assets to current liabilities (Kasmir, 2022). Firm value was proxied by Price to Book Value (PBV), as stated by Munawar (2022). The calculation of book value per share referred to Fahmi (2020). Firm size was measured using the natural logarithm of total assets, as used by Nurwida et al. (2017).

Data analysis was carried out using Moderated Regression Analysis (MRA) to examine the direct effect and the moderating effect of firm size on the relationship between PER, DER, and CR and firm value (PBV). The use of MRA referred to the procedure explained by Ghozali (2018). Before regression analysis was conducted, the data were first tested using classical assumption tests, including the normality test using Kolmogorov-Smirnov, the multicollinearity test through Tolerance and VIF values, the autocorrelation test using Durbin-Watson, the heteroscedasticity test using the Glejser test, and the linearity test using the Lagrange Multiplier approach (Ghozali, 2018). Furthermore, hypothesis testing was conducted using the t-test for partial effects, as explained by Herlina (2019), and the simultaneous test (F-test), referring to Siregar (2017). In addition, the coefficient of determination (R^2) and correlation coefficient (R) analyses were used to determine the strength of the relationship and the ability of the model to explain the dependent variable, as stated by Siregar (2018).

3. RESULTS AND DISCUSSION

3.1 Normality Test

The normality test was conducted to determine whether the residuals in the regression model were normally distributed. The test used the One-Sample Kolmogorov-Smirnov method, with the criterion that the data are normally distributed if the Asymp. Sig. (2-tailed) value is greater than 0.05, while an Asymp. Sig. (2-tailed) value less than or equal to 0.05 indicates that the data are not normally distributed (Ghozali, 2021). The results of the normality test are presented in Table 1.

Table 1. Normality Test Results

Test	Value
N (Sample)	132
Test Statistic	0.086
Asymp.Sig.(2-tailed)	0.200c

Source: Processed Data, 2026

Based on Table 1, the Asymp. Sig. (2-tailed) value is 0.200 (> 0.05), indicating that the residuals in Equation II are normally distributed and meet the normality assumption.

3.1.2 Multicollinearity Test

The multicollinearity test was conducted to determine whether there was a correlation among the independent variables in the regression model. According to Ghozali (2021), a regression model is considered free from multicollinearity if it has a Variance Inflation Factor (VIF) value of less than 10 and a Tolerance value of greater than 0.10. The multicollinearity test results obtained through SPSS are presented in Table 2.

Table 2. Multicollinearity Test Results

Model		Collinearity Statistics	
		Tolerance	VIF
1	PER (X_1)	0.887	1.128
	DER (X_2)	0.912	1.097
	CR (X_3)	0.934	1.071
	Firm Size (Z)	0.861	1.162
Dependent Variable: Firm Value (Y)			

Source: Processed Data, 2026

Based on the test results in Table 2, all variables have Tolerance values above 0.10 and VIF values below 10. Therefore, the regression model is free from multicollinearity and is feasible to be used in the analysis.

3.1.3 Autocorrelation Test

The autocorrelation test was conducted to determine whether there was a correlation among residuals in the regression model. According to Ghozali (2021), the test uses the Durbin-Watson (DW) statistic, where a model is considered free from autocorrelation if the DW value lies between dU and 4−dU. The autocorrelation test results are presented in Table 3.

Table 3. Autocorrelation Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Waston
1	0.348a	0.121	0.073	11.3366	1.924

Predictors: (Constant), PER, DER, CR, Firm Size.
Dependent Variable: Firm Value (Y).

Source: Processed Data, 2026

Based on the test results in Table 3, the Durbin-Watson value of 1.924 lies between the dU value of 1.7693 and 4−dU of 2.2307. Therefore, the regression model does not indicate autocorrelation.

3.1.4 Heteroscedasticity Test

The heteroscedasticity test was conducted to determine whether the residual variance was constant across all observations. According to Ghozali (2021), the test can be conducted using the Glejser test, where a model is considered free from heteroscedasticity if the

significance value is greater than 0.05. The heteroscedasticity test results are presented in Table 4.

Table 4. Heteroscedasticity Test Results

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.247	2.183		0.571	0.569
	PER (X_1)	0.004	0.011	0.031	0.364	0.716
	DER (X_2)	-0.143	0.635	-0.058	-0.225	0.822
	CR (X_3)	0.218	0.560	0.041	0.390	0.697
	Firm Size (Z)	-0.039	0.070	-0.075	-0.557	0.579
	PER * Firm Size (X_1*Z)	0.001	0.004	0.528	0.279	0.781
	DER * Firm Size (X_2*Z)	0.004	0.022	0.042	0.181	0.857
	CR * Firm Size (X_3*Z)	-0.008	0.020	-0.049	-0.408	0.684
a. Dependent Variable: Firm Value (Y).						

Source: Processed Data, 2026

Based on the test results in Table 4, all variables have significance values greater than 0.05. Therefore, the regression model in this study is free from heteroscedasticity.

3.1.5 Linearity Test

The linearity test aims to assess whether the regression model has been properly specified. According to Ghozali (2021), the test is conducted using the Lagrange Multiplier method by calculating the chi-square value ($n \times R^2$). The model is considered to meet the linearity assumption if the calculated chi-square value is smaller than the chi-square table value. The linearity test results are presented in Tables 5 and 6.

Table 5. Linearity Test Results

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error
1	0.188a	0.031	0.008	11.3734

Source: Processed Data, 2026

Table 6. Chi-Square Calculation Results

n	R^2 (Model Augmented)	Calculated χ^2 ($n \times R^2$)	χ^2 Table (df=124, α=5%)
132	0.031	4.092	158.904

Source: Processed Data, 2026

Based on Tables 5 and 6, the calculated χ^2 value is 132 × 0.031 = 4.092. Since the calculated χ^2 value (4.092) is smaller than the χ^2 table value (158.904), the model is linear and the linearity assumption is fulfilled.

3.2 Hypothesis Test

3.2.1 Moderated Regression Analysis (MRA)

Moderated Regression Analysis (MRA) is used to examine whether a moderating variable is able to strengthen, weaken, or change the direction of the effect of an independent variable on a dependent variable. In other words, MRA is used when researchers want to determine whether the relationship between X and Y differs under certain conditions due to the presence of a moderator variable. The MRA test results based on SPSS analysis are presented in Tables 7 and 8.

Table 7. Multiple Linear Regression Analysis Results (I)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.174	0.834		2.607	0.010
	PER (X_1)	0.047	0.021	0.407	2.238	0.027
	DER (X_2)	-0.315	0.189	-0.127	-1.667	0.098
	CR (X_3)	0.286	0.205	0.054	1.395	0.165
Dependent Variable: Firm Value (Y).						

Source: Processed Data, 2026

Based on Table 7, the Multiple Linear Regression Analysis Results I obtained are as follows:

$$\mathbf{Y = 2.174 + 0.047\ X_1 - 0.315\ X_2 + 0.286\ X_3 + e}$$

The interpretation of the equation is as follows:

1) The constant value of 2.174 indicates that Firm Value (PBV) is estimated at 2.174 when PER, DER, and CR are equal to zero.
2) The PER coefficient of 0.047 indicates that every one-unit increase in PER will increase PBV by 0.047 units.
3) The DER coefficient of −0.315 indicates that every one-unit increase in DER will decrease PBV by 0.315 units.
4) The CR coefficient of 0.286 indicates that every one-unit increase in CR will increase PBV by 0.286 units.

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The results of the MRA analysis for Equation II based on SPSS analysis are presented in Table 8.

Table 8. Multiple Linear Regression Analysis Results (II)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	15.312	6.447		2.375	0.019
	PER (X_1)	0.108	0.312	0.930	0.346	0.730
	DER (X_2)	-3.521	1.876	-1.419	-1.877	0.063
	CR (X_3)	2.314	1.653	0.438	1.400	0.164
	Firm Size(Z)	0.427	0.206	0.082	2.071	0.043
	PER * Firm Size (X_1*Z)	-0.002	0.011	-0.571	-0.182	0.856
	DER * Firm Size (X_2*Z)	0.115	0.066	1.231	1.742	0.084
	CR * Firm Size (X_3*Z)	-0.073	0.059	-0.431	-1.237	0.218
Dependent Variable: Firm Value (Y).						

Source: Processed Data, 2026

Based on Table 8, the moderated regression equation for Equation II is obtained as follows:

$$\mathbf{Y = 15.312 + 0.108X_1 - 3.521X_2 + 2.314X_3 + 0.427Z - 0.002X_1*Z + 0.115X_2*Z - 0.073X_3*Z + e}$$

The interpretation of the regression coefficients is as follows:

1) The constant value of 15.312 indicates that firm value, as proxied by Price to Book Value (PBV), is estimated at 15.312 when PER, DER, CR, firm size, and the interaction variables are equal to zero.
2) The PER coefficient (X_1) of 0.108 indicates that every one-unit increase in PER will increase PBV by 0.108 units.
3) The DER coefficient (X_2) of −3.521 indicates that every one-unit increase in DER will decrease PBV by 3.521 units.
4) The CR coefficient (X_3) of 2.314 indicates that every one-unit increase in CR will increase PBV by 2.314 units.
5) The firm size coefficient (Z) of 0.427 indicates that every one-unit increase in firm size will increase PBV by 0.427 units.
6) The interaction coefficient between PER and firm size (X_1*Z) of −0.002 indicates that firm size tends to weaken the effect of PER on PBV.
7) The interaction coefficient between DER and firm size (X_2*Z) of 0.115 indicates that firm size tends to strengthen the effect of DER on PBV.
8) The interaction coefficient between CR and firm size (X_3*Z) of −0.073 indicates that firm size tends to weaken the effect of CR on PBV.

3.2.2 Correlation Coefficient Analysis (R)

Correlation coefficient analysis is used to determine the degree of relationship between the independent variables and the dependent variable in the research model, whether

the relationship is weak, moderate, or strong. The correlation coefficient test results are presented in Table 9.

Table 9. Correlation Coefficient Test Results (R) (I)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.312a	0.097	0.075	11.3224
Predictors: (Constant), CR, PER, DER.				
Dependent Variable: Firm Value (Y)				

Source: Processed Data, 2026

Based on Table 9, the correlation coefficient (R) value of 0.312 indicates that the simultaneous relationship between PER, DER, and CR and firm value is categorized as low. This result indicates that variations in firm value are not only influenced by the variables included in the model but also by other factors outside this study.

Table 10. Correlation Coefficient Test Results (R) (II)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.348a	0.121	0.073	11.3366
Predictors: (Constant), CR*Firm Size, DER*Firm Size, PER*Firm Size, Firm Size, CR, DER, PER.				

Source: Processed Data, 2026

Based on Table 10, the R value of 0.348 indicates a low relationship. However, the increase in the R value compared to Equation I indicates that the addition of the moderating variable, firm size, improves the strength of the model.

3.2.3 Coefficient of Determination

The coefficient of determination (R^2) is used to determine how much the independent variables are able to explain variations in the dependent variable in the research model.

Table 11. Coefficient of Determination Test Results (R^2) (I)

Model	R Square (R^2)	Adjusted R Square	Contribution of Other Variables
1	0.097 (9.7%)	0.075	90.3%

Source: Processed Data, 2026

Based on Table 11, the R^2 value of 0.097 or 9.7% indicates that PER (X_1), DER (X_2), and CR (X_3) collectively explain 9.7% of the variation in Firm Value (PBV). The remaining 90.3% is explained by other variables outside this research model.

Table 12. Coefficient of Determination Test Results (R^2) (II)

Model	R Square (R^2)	Adjusted R Square	Contribution of Other Variables
1	0.121 (12.1%)	0.073	87.9%

Source: Processed Data, 2026

Based on Table 12, the R^2 value of 0.121 or 12.1% indicates that by including firm size as a moderating variable, the model's ability to explain variations in firm value increases to 12.1%. The remaining 87.9% is explained by other variables outside the model.

3.2.4 Simultaneous Test (F Test)

The F-test is used to determine whether all independent variables simultaneously have a significant effect on the dependent variable. The criterion is that if the calculated F value is greater than the F table value or the significance value is less than 0.05, the effect is significant. The F table value ($df_1 = 3$, $df_2 = 128$, $\alpha = 5\%$) is 2.680. The simultaneous test results using SPSS are presented in Table 13.

Table 13. Simultaneous Test Results (F-Test) (I)

Model	Sum of Squares	Mean Square	F	Significance
Regression	5,291.427	1,763.809	4.585	0.005b
Residual	49,219.812	384.530		

Dependent Variable: Firm Value (Y).
Predictors: (Constant), CR, DER, PER.

Source: Processed Data, 2026

Based on the test results in Table 13, the calculated F value is 4.585, which is greater than the F table value of 2.680, and the significance value is 0.005, which is less than 0.05. These results indicate that PER, DER, and CR collectively have a significant effect on Firm Value (PBV) in industrial sector companies listed on the Indonesia Stock Exchange during the 2022–2024 period.

Table 14. Simultaneous Test Results (F Test) (II)

Model	Sum of Squares	Mean Square	F	Significance
Regression	6,599.285	942.755	2.904	0.007b
Residual	47,911.954	386.387		

Dependent Variable: Firm Value (Y).
Predictors: (Constant), CR*Firm Size, DER*Firm Size, PER*Firm Size, Firm Size, CR, DER, PER.

Source: Processed Data, 2026

Based on Table 14, the calculated F value of 2.904 is greater than the F table value of 2.065 ($df_1 = 7$, $df_2 = 124$), and the significance value of 0.007 is less than 0.05. Therefore, the moderated regression model in Equation II has a significant simultaneous effect on firm value.

3.2.5 Partial Test (t Test)

The t-test is used to determine the partial effect of each independent variable on the dependent variable. The t table value (df = 128, $\alpha = 5\%$, two-tailed test) is 1.979. The partial test results using SPSS are presented in Table 15.

Table 15. Partial Test Results (t Test) (I)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.174	0.834		2.607	0.010
	PER (X_1)	0.047	0.021	0.407	2.238	0.027
	DER (X_2)	-0.315	0.189	-0.127	-1.667	0.098
	CR (X_3)	0.286	0.205	0.054	1.395	0.165
Dependent Variable: Firm Value (Y).						

Source: Processed Data, 2026

Based on the partial test results of the first equation (t-test) in Table 15, the results can be explained as follows:

1) PER (X_1) has a t-value of 2.238 > 1.979 and a significance value of 0.027 < 0.05. Therefore, PER has a positive and significant effect on Firm Value (PBV).
2) DER (X_2) has a t-value of 1.667 < 1.979 and a significance value of 0.098 > 0.05. Therefore, DER does not have a significant effect on Firm Value (PBV).
3) CR (X_3) has a t-value of 1.395 < 1.979 and a significance value of 0.165 > 0.05. Therefore, CR does not have a significant effect on Firm Value (PBV).

Table 16. Partial Test Results (t Test) (II)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	15.312	6.447		2.375	0.019
	PER (X_1)	0.108	0.312	0.930	0.346	0.730
	DER (X_2)	-3.521	1.876	-1.419	-1.877	0.063
	CR (X_3)	2.314	1.653	0.438	1.400	0.164
	Firm Size (Z)	0.427	0.206	0.082	2.071	0.043
	PER * Firm Size (X_1*Z)	-0.002	0.011	-0.571	-0.182	0.856
	DER * Firm Size (X_2*Z)	0.115	0.066	1.231	1.742	0.084
	CR * Firm Size (X_3*Z)	-0.073	0.059	-0.431	-1.237	0.218
Dependent Variable: Firm Value (Y).						

Source: Processed Data, 2026

The moderation test results in Table 16 show that:

1) PER has a coefficient value of 0.108, a t-value of 0.346, and a significance value of 0.730 > 0.05. This result indicates that PER has a positive but insignificant effect on Firm Value, which is proxied by PBV.
2) DER has a coefficient value of -3.521, a t-value of -1.877, and a significance value of 0.063 > 0.05. This result indicates that DER has a negative but insignificant effect on Firm Value.
3) CR has a coefficient value of 2.314, a t-value of 1.400, and a significance value of 0.164 > 0.05. This result indicates that CR has a positive but insignificant effect on Firm Value.
4) Firm Size has a coefficient value of 0.427, a t-value of 2.071, and a significance value of 0.043 < 0.05. This result indicates that Firm Size has a positive and significant effect on Firm Value.
5) The PER*Firm Size interaction variable has a coefficient value of -0.002, a t-value of -0.182, and a significance value of 0.856 > 0.05. This result indicates that Firm Size is unable to moderate the effect of PER on Firm Value. The negative coefficient indicates a tendency to weaken the relationship between PER and PBV; however, because the result is not significant, the moderating effect is not statistically proven.
6) The DER*Firm Size interaction variable has a coefficient value of 0.115, a t-value of 1.742, and a significance value of 0.084 > 0.05. This result indicates that Firm Size is unable to moderate the effect of DER on Firm Value at the 5% significance level. The

positive coefficient indicates a tendency to strengthen the relationship between DER and PBV; however, the effect is not significant.

7) The CR*Firm Size interaction variable has a coefficient value of -0.073, a t-value of -1.237, and a significance value of 0.218 > 0.05. This result indicates that Firm Size is unable to moderate the effect of CR on Firm Value. The negative coefficient indicates a tendency to weaken the relationship between CR and PBV; however, because the result is not significant, the moderating effect cannot be statistically proven.

3.3 DISCUSSION

The Effect of Price Earning Ratio (PER) on Firm Value

The results of Equation II show that Price Earning Ratio (PER) has a positive coefficient of 0.108, but its significance value of 0.730 is greater than 0.05. This indicates that PER does not have a significant effect on firm value, as measured by Price to Book Value (PBV), after firm size and interaction variables are included in the model. Although a higher PER may reflect market expectations regarding future earnings, this expectation was not sufficient to significantly influence the valuation of industrial sector companies during the observation period.

This result can be understood from the characteristics of industrial companies, which generally require substantial investment in fixed assets, production facilities, machinery, technology, and supporting infrastructure. Consequently, investors may not assess a company merely from its market price relative to earnings, but also from its ability to maintain production capacity, control operating costs, manage asset utilization, and sustain profit growth. A high PER may be interpreted positively when it is supported by stable earnings and convincing growth prospects. However, when earnings are vulnerable to increases in raw material costs, energy prices, logistics expenses, or declining product demand, PER may not provide a sufficiently strong signal for investors.

The industrial sector also faces demand volatility that may arise from changes in consumer purchasing power, business cycles, export conditions, and fluctuations in demand from downstream industries. Under such conditions, investors tend to consider the sustainability of earnings rather than relying solely on PER. Therefore, the insignificant effect of PER indicates that market expectations reflected in this ratio were not the main consideration in determining firm value among industrial sector companies. This finding differs from Hutapea et al. (2021) and Nurindrayani and Indrati (2022), which found a significant effect of PER on firm value.

The Effect of Debt to Equity Ratio (DER) on Firm Value

The results show that DER has a negative coefficient of -3.521 with a significance value of 0.063, which is greater than 0.05. Thus, DER has a negative but insignificant effect on firm value. This result indicates that an increase in the proportion of debt tends to reduce

PBV, although the effect is not statistically sufficient to conclude that leverage directly determines firm value.

In industrial companies, debt is commonly used to finance working capital requirements, procure raw materials, purchase machinery, expand production capacity, and support long-term investment. Therefore, a high DER does not necessarily indicate poor financial conditions. Debt may be viewed positively when it is used for productive purposes and is followed by improvements in production efficiency, sales growth, or profitability. Conversely, leverage may become a concern when the company faces weak demand, rising interest expenses, slower inventory turnover, or declining operating cash flows.

The insignificant result suggests that investors do not assess debt solely from its amount relative to equity. Rather, they are likely to consider whether the company can manage its debt obligations while maintaining operational performance. In the industrial sector, companies with relatively high debt may still be valued positively when their fixed assets are productive, their capacity utilization is adequate, and their operations generate sufficient returns. Hence, DER alone may not be a decisive indicator of firm value. This finding is consistent with Listyawati and Kristiana (2021) and Savira and Ferdian (2024), but differs from Atrianingsih and Nyale (2022).

The Effect of Current Ratio (CR) on Firm Value

The results indicate that CR has a positive coefficient of 2.314, but the significance value of 0.164 is greater than 0.05. Therefore, CR has a positive but insignificant effect on firm value. This finding shows that stronger liquidity does not automatically lead to a higher PBV in industrial sector companies.

Industrial companies generally require considerable working capital to finance the purchase of raw materials, maintain inventory, pay suppliers, cover employee expenses, and support daily production activities. In this context, current assets are not always fully available in cash, as they may be tied up in inventories or trade receivables. A high CR may indicate that the company has the capacity to meet short-term obligations; however, it may also reflect slow inventory turnover, inefficient receivable collection, or idle current assets that are not optimally used to generate returns.

Investors may therefore place greater emphasis on the quality and productivity of current assets rather than on the level of liquidity alone. For example, a company with a moderate CR but efficient inventory management, stable sales, and strong operating cash flow may be viewed more favorably than a company with a high CR caused by excessive stock accumulation or slow receivable turnover. This condition is particularly relevant in the industrial sector, where demand fluctuations can affect inventory levels and cash conversion cycles. Therefore, CR does not appear to be a sufficiently strong signal to influence firm value. This finding is in line with Utami and Welas (2019), but differs from Febrian et al. (2022).

The Effect of Firm Size on Firm Value

The results show that firm size has a positive coefficient of 0.427 with a significance value of 0.043. This finding indicates that firm size has a positive and significant effect on firm value. Larger industrial companies tend to have higher PBV because they are generally supported by broader asset bases, more established production facilities, stronger operational capacity, and better access to funding sources.

In the industrial sector, firm size is closely related to the availability of fixed assets, production capacity, distribution networks, and the ability to secure raw material supply. Large companies are also more likely to have stronger bargaining power with suppliers, better access to bank financing or capital markets, and greater ability to spread operational risks across products or markets. These conditions may reduce uncertainty in the eyes of investors and strengthen confidence in the company's long-term prospects.

However, the positive effect of firm size should not be interpreted as evidence that large assets alone guarantee superior performance. The market is more likely to value firm size positively when the company is able to use its assets efficiently, maintain stable sales, and respond to changes in market demand. Thus, the significant effect of firm size indicates that investors perceive larger industrial companies as having relatively better resilience and capacity to sustain operations. This finding is consistent with Nurmansyah et al. (2023), but differs from Indrayani et al. (2021).

The Effect of PER on Firm Value with Firm Size as a Moderating Variable

The interaction between PER and firm size has a coefficient of -0.002 with a significance value of 0.856. This result indicates that firm size does not moderate the effect of PER on firm value. Although the coefficient is negative, the relationship is not statistically significant; therefore, firm size cannot be concluded to weaken the effect of PER on PBV.

In industrial companies, a larger scale of assets and operations does not necessarily make PER more influential in investors' valuation decisions. This is because earnings expectations reflected in PER may still be affected by production costs, capacity utilization, raw material prices, and uncertainty in market demand. A large company may possess substantial fixed assets, but investors may remain cautious when those assets are not accompanied by efficient operations or stable earnings growth.

Accordingly, company size does not appear to change the way investors interpret PER in this sector. Investors may continue to assess future earnings prospects by considering multiple operational and market factors rather than relying on the combination of PER and firm size alone.

The Effect of DER on Firm Value with Firm Size as a Moderating Variable

The interaction between DER and firm size has a coefficient of 0.115 with a significance value of 0.084. Since the significance value is greater than 0.05, firm size is not proven to moderate the effect of DER on firm value. The positive coefficient only indicates the direction of the relationship in the model and cannot be interpreted as a statistically confirmed strengthening effect.

The absence of a moderating role may be related to the nature of industrial financing. Larger companies may have greater assets and wider access to external funding, but these advantages do not automatically make debt more acceptable to investors. The market may still evaluate whether debt is used efficiently, whether it is supported by sufficient operating cash flow, and whether the company can manage interest expenses during periods of declining demand.

In other words, the size of the company does not eliminate the risk associated with leverage. Even large industrial companies may face financial pressure when production costs rise, sales decline, or fixed assets do not generate adequate returns. Therefore, investors are likely to assess debt management and operational performance more carefully than company size alone. This finding differs from Anjani (2024), who found that firm size moderated the relationship between DER and firm value.

The Effect of CR on Firm Value with Firm Size as a Moderating Variable

The interaction between CR and firm size has a coefficient of -0.073 with a significance value of 0.218. This result indicates that firm size does not moderate the effect of CR on firm value. Although the coefficient is negative, the relationship is not statistically significant, meaning that firm size does not change the effect of liquidity on PBV.

For industrial companies, large asset ownership does not necessarily make liquidity more valuable in the eyes of investors. Larger firms may require more working capital to finance production, maintain inventory, manage receivables, and support broader distribution activities. As a result, a high CR in large companies may not always signal stronger financial performance, particularly when current assets are concentrated in slow-moving inventories or receivables with long collection periods.

This finding suggests that investors evaluate liquidity together with the efficiency of working capital management. The ability to convert inventory and receivables into cash, maintain production continuity, and respond to changing demand may be more important than the absolute level of CR. Therefore, firm size is not proven to strengthen or weaken the relationship between CR and firm value. This finding is consistent with Desi and Baviga (2024).

4. CONCLUSION

This study examined the effect of Price Earning Ratio (PER), Debt to Equity Ratio (DER), and Current Ratio (CR) on firm value, with firm size as a moderating variable, in

industrial sector companies listed on the Indonesia Stock Exchange during the 2022–2024 period. The results of the moderated regression model show that firm size has a positive and significant effect on firm value. In contrast, PER, DER, and CR do not have significant partial effects on firm value after firm size and interaction variables are included in the model. In addition, firm size is not proven to moderate the relationship between PER, DER, and CR and firm value because all interaction variables have significance values greater than 0.05.

Although the moderation model is simultaneously significant, its coefficient of determination is only 12.1%. This finding indicates that PER, DER, CR, firm size, and their interaction variables explain only a limited proportion of the variation in firm value. Therefore, firm value in industrial sector companies is likely influenced by other factors not included in this study, such as profitability, dividend policy, sales growth, investment decisions, corporate governance, macroeconomic conditions, and market sentiment.

This study has several limitations. First, the research was limited to industrial sector companies listed on the Indonesia Stock Exchange during the 2022–2024 period; therefore, the findings cannot be generalized to companies in other sectors or different observation periods. Second, the study only used PER, DER, CR, and firm size as explanatory variables, resulting in a relatively low explanatory power of the model. Third, the use of secondary data from annual financial reports may not fully capture non-financial factors that influence investor perceptions and firm value, such as management quality, business strategy, corporate reputation, innovation, and market expectations. Finally, this study used firm size only as a moderating variable, although firm size may also have a direct or indirect relationship with firm value through other financial performance indicators.

Future studies are expected to use a longer observation period, expand the sample to other sectors, and include additional variables such as profitability, dividend policy, sales growth, corporate governance, investment decisions, and macroeconomic indicators. Further research may also consider using panel data regression methods to better capture differences among companies and across observation periods.

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