



## IMPACT OF ROA AND ROE ON PBV, WITH CAR AS A MODERATING VARIABLE: A STUDY OF CONVENTIONAL PRIVATE BANKS IN INDONESIA LISTED ON THE INDONESIA STOCK EXCHANGE DURING 2014–2023

Lintang Permata Jati<sup>1)</sup>; Irvan Yoga Pardistya<sup>2\*)</sup>

<sup>1,2)</sup> *Department of Management, Faculty of Economics and Business, Universitas Singaperbangsa Karawang*

\*Correspondent Author: [irvan.yoga@fe.unsika.ac.id](mailto:irvan.yoga@fe.unsika.ac.id)

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### KEYWORDS

Return on Assets; Return On Equity; Price To Book Value; Capital Adequacy Ratio; Indonesian private banks.

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### ABSTRACT

**Purpose:** This study examines the impact of Return on Assets (ROA) and Return on Equity (ROE) on Price-to-Book Value (PBV), with Capital Adequacy Ratio (CAR) as a moderating variable, focusing on Indonesian private conventional banks from 2014 to 2023. **Method:** A quantitative approach with a descriptive-verify design was employed. Secondary data were collected from the annual reports of banks listed on the Indonesia Stock Exchange. The analysis was conducted using multiple linear regression and moderated regression analysis (MRA) with IBM SPSS Statistics 26. **Results:** Both ROA and ROE significantly affect PBV. CAR significantly moderates the relationship between ROA and PBV but does not significantly moderate the relationship between ROE and PBV. **Findings:** The results highlight that strong capital adequacy amplifies the effect of profitability particularly ROA on market valuation. **Novelty:** This research underscores the post-pandemic role of CAR in enhancing the influence of ROA on PBV in the Indonesian banking sector. **Originality:** It offers fresh insights into how capital strength shapes market perceptions of profitability, especially during periods of economic uncertainty. **Conclusion:** Effective management of assets, equity, and capital is crucial for improving market perception and sustaining competitiveness. **Type of Paper:** Research Paper.

## INTRODUCTION

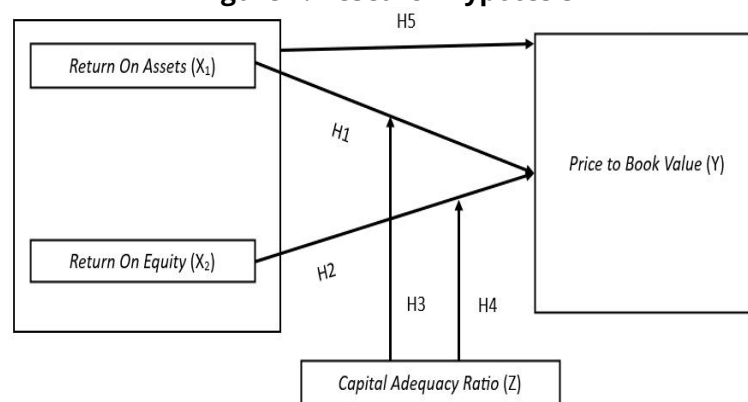
The banking industry in developing countries like Indonesia faces growing challenges in maintaining stability amid economic volatility. According to Freddy & Toni (2020), private conventional banks play a crucial role in the national economy through financial intermediation and liquidity distribution. Events such as the COVID-19 pandemic have exposed fluctuations in bank performance, underscoring the importance of understanding the factors influencing financial health and market valuation. Return on Assets (ROA) and Return on Equity (ROE) are key profitability indicators that assess how effectively banks use resources to generate profits. However, to evaluate long-term financial stability, the Capital Adequacy Ratio (CAR) is also essential, as it measures a bank's ability to absorb risk and maintain investor trust.

According to Martadinata et al., (2023), CAR serves as a safety buffer that enables banks to absorb potential losses, sustain operational risks, and uphold investor trust during financial uncertainties. CAR holds significant relevance in assessing how profitability correlates with a bank's market worth, typically reflected through the PBV ratio. As a tool, PBV helps investors identify whether a bank's stock is undervalued or overvalued compared to its book value, making it an essential element in investment evaluation Husna & Satria (2019). Several previous studies have explored these relationships, but results remain inconsistent. While Öztürk (2017) found a significant influence of ROE and ROA on PBV, (Husna & Satria, 2019) reported no significant correlation, suggesting the need for further investigation.

According to Ruzgar (2025), banks with higher CAR tend to attract more investor confidence due to their greater capacity to manage risks and maintain liquidity, which, in turn, may affect how profitability indicators translate into market value. As competition in the banking sector becomes more intense similar to the heightened rivalry observed in the coffee shop industry (Nurjaya et al., 2019) private banks must not only achieve profitability but also manage their capital structure strategically to survive in a dynamic environment.

This research seeks to analyze how ROA and ROE influence the PBV, with CAR acting as a moderating factor within the relationship between the variables. The research focuses on private conventional banks in Indonesia over the period from 2014 to 2023 and is intended to offer strategic insights into how these banks can strengthen their financial performance while sustaining investor confidence through sufficient capital reserves.

**Figure 1. Research hypothesis**



### Research hypothesis:

- H1 : ROA has a positive and significant effect on the PBV.
- H2 : ROE positively and significantly affects the PBV.
- H3 : The CAR moderates the relationship between ROA and the PBV.
- H4 : The CAR serves as a moderating variable in the relationship between ROE and the PBV.
- H5 : The CAR simultaneously moderates the influence of both ROA and ROE on the PBV.

## METHOD

- a. Research Approach ; This research adopts a quantitative associative method to analyze how ROA and ROE affect PBV, with CAR positioned as a moderating factor. The study is centered on privately-owned conventional banks listed on the Indonesia Stock Exchange (IDX).
- b. Research Location and Period ; The research was conducted on private conventional banks that are listed on the Indonesia Stock Exchange (IDX). The study covers the period from September 2024 to February 2025. Data collection was done through a documentation method, primarily by accessing official financial reports published on the IDX's website, as well as additional financial data retrieved from sources like MarketScreener and CariSaham.
- c. Population and Sample ; The population targeted in this research includes the complete group of entities relevant to the study's findings. Specifically, it comprises all private conventional banks that were publicly listed on the Indonesia Stock Exchange (IDX) during the period from 2014 to

2023. A purposive sampling technique, as recommended by Kyere & Ausloos (2021), was employed to select the sample. The sample includes banks that meet specific criteria:

1. Private conventional banks that were actively listed on the Indonesia Stock Exchange (IDX) throughout the years 2014 to 2023.
2. Institutions that regularly issued audited financial reports as of December 31 each year during the 2014–2023 period and provided complete data for all variables analyzed in this study.

Based on these criteria, 5 banks were selected as the research sample.

d. Data Collection Method

1. Form of Data Collection ; This study utilizes a time series data collection method, in which data are gathered sequentially over the period from 2014 to 2023. This approach is used to identify patterns and examine relationships between variables across time.
2. Types of Data ; This research uses quantitative data. According to Kyere & Ausloos (2021), quantitative data are numeric data that can be analyzed statistically.
3. Data Sources ; This study uses secondary data, namely data sourced from existing documents such as financial statements published by companies and made available to the public through IDX and official bank websites.
4. Data Collection Techniques ; The technique used is documentation, where researchers retrieve data from financial reports, annual reports, and IDX publications. Documentation includes:
  - Printed documentation: Such as audited annual financial statements.
  - Electronic documentation: Such as PDF or Excel files obtained from IDX or official bank websites.

e. Operational Definition and Variable Measurement

1. Return On Assets ; As stated by Ery Yanto et al., (2021), ROA represents a financial metric that illustrates how effectively a company utilizes its total assets to generate net income.

$$\text{Return On Assets (ROA)} = \frac{\text{Earning after Interest and Tax}}{\text{Total Assets}} \times 100\%$$

2. Return On Equity ; According to Lusiana (2020), ROE also known as the profitability of shareholders' equity—is a financial ratio that evaluates the company's net profit after taxes in comparison to the equity owned by its shareholders.

$$\text{Return On Equity (ROE)} = \frac{\text{Earning after Interest and Tax}}{\text{Equity}} \times 100\%$$

3. Capital Adequacy Ratio ; Khairi et al., (2024), defines the CAR is an indicator of a bank's ability to sustain adequate capital while managing various risks that may affect its capital condition.

$$\text{Capital Adequacy Ratio (CAR)} = \frac{\text{Total Modal}}{\text{Risk Weighted Assets}} \times 100\%$$

4. Price To Book Value ; As noted by Rossela et al., (2024), The PBV ratio reflects the relationship between a company's stock market price and its book value per share, serving as an indicator of how investors evaluate the firm's worth in comparison to its recorded accounting value.

$$\text{Price To Book Value (PBV)} = \frac{\text{Market Price per Share}}{\text{Book Value per Share}}$$

- f. Classical Assumption Test ; This test represents an essential component of statistical analysis, particularly in the context of multiple linear regression, though it is not mandatory for simple linear regression models. The primary objective is to confirm the validity and dependability of the regression results before conducting further analysis. This study applies several classical assumption tests, which include:

1. Normality Test ; The normality test aims to assess whether the residuals from the regression model are distributed normally. In this study, the Kolmogorov-Smirnov test is applied. A significance level (Asymp. Sig) above 0.05 suggests that the residuals meet the normality assumption, indicating no significant deviation from a normal distribution.
  2. Multicollinearity Test ; This test checks for the presence of high correlations among the independent variables, which could distort the accuracy of the regression model. Two key indicators are applied:
    - Tolerance Value: A result above 0.10 suggests that multicollinearity is not present.
    - Variance Inflation Factor (VIF): A VIF score below 10.00 implies that multicollinearity does not exist, while a score above 10.00 may indicate potential multicollinearity issues.
  3. Heteroscedasticity ; This test evaluates whether the residuals exhibit constant variance across different values of the independent variables. Inconsistencies in this spread may point to heteroscedasticity, which can compromise the accuracy and trustworthiness of the regression analysis. A sound regression model assumes homoscedasticity, meaning that the residuals exhibit constant variance. In this study, the Scatterplot method is used. If the scatter points form a specific pattern, it suggests the presence of heteroscedasticity. However, if the points are randomly dispersed above and below the Y-axis (around the zero line), it indicates that heteroscedasticity is not an issue.
- g. Methods Of Analysis
1. Descriptive Statistical Analysis ; This study utilizes descriptive statistics to summarize and describe the data using key indicators such as the average (mean), maximum, and minimum values. To ensure the data meets the assumptions necessary for regression analysis, normality testing was performed on the residuals. These tests involve both visual inspection, including P-P plots and histograms, as well as statistical testing using the Kolmogorov-Smirnov test to determine whether the distribution of residuals aligns with a normal curve.
  2. Moderated Regression Analysis (MRA) ; To evaluate the moderating effect of the CAR, the study applies Moderated Regression Analysis (MRA), often referred to as an interaction test. As outlined by Sari (2021), MRA is a specialized form of multiple regression that introduces interaction terms products of the independent and moderating variables into the regression equation. This approach facilitates analysis of whether the moderating variable significantly influences the strength or direction of the relationship between the predictors and the outcome variable. The model used is as follows:
 
$$Y = \alpha + \beta_1 ROA + \beta_2 ROE + \beta_3 CAR + \beta_4 (ROA \times CAR) + \beta_5 (ROE \times CAR) + e$$
- h. Hypothesis Testing ; The study employs multiple regression analysis, assessed through both overall (simultaneous) and individual (partial) hypothesis tests:
1. Simultaneous Test (F test) ; The F-test is used to determine whether ROA and ROE jointly have a statistically significant effect on the PBV. The interpretation relies on the significance level (Sig.) provided in the regression output:
    - 1) If Sig. < 0.05, the combined effect of ROA and ROE on PBV is considered significant.
    - 2) If Sig. > 0.05, it implies that ROA and ROE do not significantly influence PBV when considered together.
  2. Partial Test (t test) ; The t-test is applied to assess the individual contribution of each independent variable ROA and ROE toward explaining variations in the dependent variable, PBV. The outcome is evaluated by comparing the computed t-value ( $t_{count}$ ) against the critical t-value ( $t_{table}$ ), based on a chosen significance level ( $\alpha$ ) and degrees of freedom (df):
    - 1) If  $t_{count} < t_{table}$ , the null hypothesis ( $H_0$ ) is accepted, indicating the variable does not significantly affect PBV.
    - 2) If  $t_{count} > t_{table}$ , the alternative hypothesis ( $H_a$ ) is accepted, showing that the variable has a significant impact on PBV.

## RESULTS AND DISCUSSION

### RESULTS

1. **Descriptive Statistics** ; Descriptive statistical analysis is used to present a concise overview of the dataset by highlighting central tendencies and variability, including the mean, standard deviation, as well as the highest and lowest values observed. The descriptive summary encompasses four variables ROA, ROE, CAR, and PBV across a total of 50 data points.

**Tabel 1. Descriptive Statistics**

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Return On Assets	50	,02	4,21	1,8832	1,13733
Return On Equity	50	,11	21,22	10,4424	5,77031
Capital Adequacy Ratio	50	14,37	31,04	21,5370	4,13775
Price To Book Value	50	,48	4,78	2,0512	1,38368
Valid N (listwise)	50				

Source: Processed SPSS26 data for 2025

- a) PBV as the Dependent Variable (Y) ; The PBV variable reaches a peak of 4.78 and a low of 0.48. Its average value is 2.0512, with a standard deviation of 1.38368. Since the mean surpasses the standard deviation, this reflects a relatively uniform data distribution with minimal variability.
  - b) Return on Assets (ROA) as X1 ; ROA values range from 0.02 to 4.21, with an average of 1.8832 and a standard deviation of 1.13733. The higher mean in comparison to the standard deviation implies that the data points are closely grouped, indicating limited dispersion within the ROA variable.
  - c) Return on Equity (ROE) as X2 ; ROE exhibits a range from 0.11 to 21.22. The mean is recorded at 10.4424, while the standard deviation stands at 5.77031. The fact that the mean is greater than the standard deviation suggests that the ROE values are not widely spread, pointing to moderate consistency and relatively low variability.
  - d) Capital Adequacy Ratio (CAR) as the Moderating Variable (M) ; CAR shows a minimum of 14.37 and a maximum of 31.04, with an average of 21.5370 and a standard deviation of 4.13775. Given that the mean exceeds the standard deviation, it can be inferred that the CAR data maintains a relatively steady pattern with low variability, suggesting a homogeneous distribution.
2. **Classical Assumption Test** ; To ensure the reliability and validity of the regression model, this study performed several classical assumption tests. A regression model is considered statistically sound when it meets key classical criteria. The following methods were employed:
    - a) Normality ; To assess whether the data follow a normal distribution, the Kolmogorov-Smirnov test was applied to each variable. If the resulting significance value is greater than 0.05, it indicates that the data do not significantly differ from a normal distribution, thus supporting the null hypothesis ( $H_0$ ).

**Tabel 2. One-Sample Kolmogorov-Smirnov Test**

One-Sample Kolmogorov-Smirnov Test		Unstandardized Residual
N		42
Normal Parameters <sup>a,b</sup>	Mean	,0000000
	Std. Deviation	1,01084305
Most Extreme Differences	Absolute	,089
	Positive	,083
	Negative	-,089
Test Statistic		,089
Asymp. Sig. (2-tailed)		,200 <sup>c,d</sup>

a. Test distribution is Normal.

b. Calculated from data.

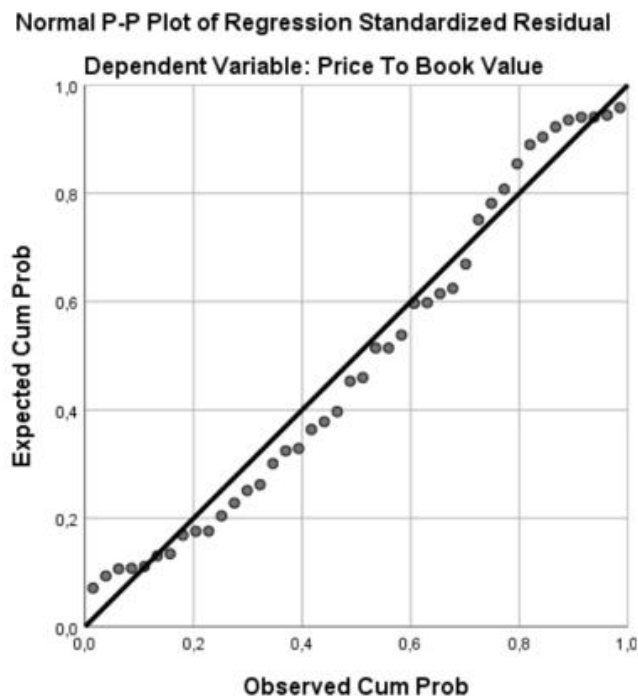
c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

Source: Processed SPSS26 data for 2025

According to the findings displayed in the table, the Kolmogorov-Smirnov test returned an Asymp. Sig. value of 0.200, which exceeds the standard significance level of 0.05. This result confirms that the dataset follows a normal distribution, thereby validating its use for subsequent analyses. Additionally, normality can be visually evaluated using the P-P Plot. When the data points align closely along the diagonal reference line, it further supports the assumption of normality and confirms the dataset's appropriateness for further statistical testing.

**Figure 2. Plot of Regressions Standardized Residual**



Source: Processed SPSS26 data for 2025

The figure above presents the results of the normality test using the Normal P-P Plot. The data points closely align with the diagonal line, indicating a normal distribution and confirming that the dataset is appropriate for further statistical analysis.

b) Multicollinearity test ; Below are the results obtained from the multicollinearity test:

**Tabel 3. Multicollinearity Test**

Model	Coefficients <sup>a</sup>					Collinearity Statistics	
	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.	Tolerance	VIF
1(Constant)	,046	1,289		,036	,972		
Return On Assets	,082	,485	,063	,169	,867	,106	9,443
Return On Equity	,173	,099	,615	1,760	,086	,120	8,368
Capital Adequacy Ratio	-,004	,075	-,009	-,049	,962	,435	2,297

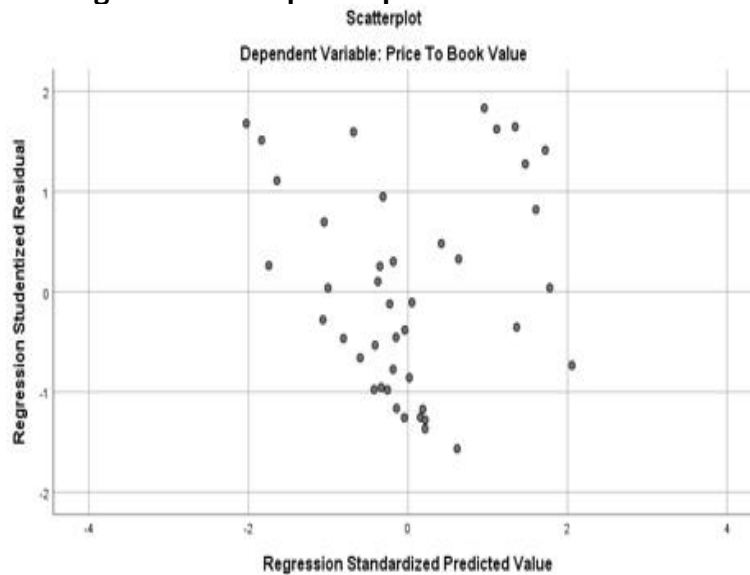
a. Dependent Variable: Price To Book Value

Source: Processed SPSS26 data for 2025

The multicollinearity test aims to detect high intercorrelations among the independent variables. Based on the results, the tolerance values for ROA, ROE, and CAR were 0.106, 0.120, and 0.435, respectively. As all values are greater than the 0.10 threshold, there is no evidence of multicollinearity. Correspondingly, the Variance Inflation Factor (VIF) values for ROA, ROE, and CAR were 9.443, 8.368, and 2.297, all below the critical limit of 10. These findings confirm that multicollinearity is not an issue in the regression model.

c) Heteroscedasticity test ; Below are the results obtained from the Heteroscedasticity test:

**Figure 3. Scatterplot Dependent Variable**



Source: Processed SPSS26 data for 2025

To assess heteroscedasticity, a scatterplot of the residuals was examined. The distribution of points appeared random and dispersed both above and below the regression line without forming a discernible pattern. This suggests the absence of heteroscedasticity, fulfilling the assumption of constant variance across residuals.

3. **Moderated Regression Analysis Test;** Below are the results obtained from the Moderated Regression Analysis Test:

**Tabel 4. Moderated Regression Analysis Test**

		Coefficients <sup>a</sup>				
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	9,119	2,315		3,939	,000
	Return On Assets	3,591	2,816	2,749	1,275	,210
	Return On Equity	-1,344	,561	-4,765	-2,396	,022
	Capital Adequacy Ratio	-,458	,120	-1,112	-3,803	,001
	ROA*CAR	-,161	,123	-3,205	-1,303	,201
	ROE*CAR	,071	,025	6,750	2,815	,008

a. Dependent Variable: Price To Book Value

Source: Processed SPSS26 data for 2025

The coefficients table above outlines the regression model used to examine the influence of independent variables on the dependent variable, formulated as follows:

$$Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 Z + \beta_4 (X_1 \times Z) + \beta_5 (X_2 \times Z) + e$$

$$Y = 9.119 + 3.591X_1 - 1.344X_2 - 0.458Z - 0.161(X_1 \times Z) + 0.071(X_2 \times Z) + e$$

The interpretation of the regression output is as follows:

- a) The constant value of 9.119 implies that if ROA (X1), ROE (X2), Capital Adequacy Ratio (Z), and the interaction terms (X1Z and X2Z) are all zero, then the estimated value of PBV (Y) is 9.119.
- b) The regression coefficient for ROA (X1) is 3.591, reflecting a positive association with PBV. However, with a p-value of 0.210, this relationship is not statistically significant, indicating that ROA does not have a meaningful effect on PBV within the studied sample.
- c) The ROE (X2) coefficient is -1.344 and is statistically significant at the 5% level (p = 0.022), suggesting that an increase in ROE corresponds with a decrease in PBV, highlighting a significant inverse relationship.
- d) The coefficient for CAR (Z) is -0.458, with a p-value of 0.001, indicating a significant negative effect. This means that a higher CAR is associated with a lower PBV.
- e) The interaction term between ROA and CAR (X1Z) has a coefficient of -0.161 and a p-value of 0.201, showing that the moderating effect of CAR on the relationship between ROA and PBV is not statistically significant.
- f) The interaction between ROE and CAR (X2Z) yields a coefficient of 0.071, with a p-value of 0.008, which confirms a significant moderating effect. This suggests that CAR enhances the influence of ROE on PBV, reinforcing a positive relationship.

**4. Test Results ;**

- a) The F-test is utilized to assess whether the group of independent variables collectively exerts a significant impact on the dependent variable. This test measures the overall fit of the regression model. A p-value less than 0.05 indicates that the model is statistically significant, meaning that ROA, ROE, and CAR together influence PBV. If the p-value exceeds 0.05, the model is not considered statistically significant, implying that the independent variables do not jointly affect the dependent variable.

**Tabel 5. F Test results (simultaneous test)**

		ANOVA <sup>a</sup>				
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	48,473	5	9,695	12,866	,000 <sup>b</sup>
	Residual	27,125	36	,753		
	Total	75,598	41			

a. Dependent Variable: Price To Book Value

b. Predictors: (Constant), ROE\*CAR, Capital Adequacy Ratio, Return On Assets, Return On Equity, ROA\*CAR

Source: Processed SPSS26 data for 2025

The ANOVA table displays the outcome of the F-test, indicating an F-statistic of 12.866. This value exceeds the critical threshold of approximately 2.45, based on degrees of freedom  $df_1 = 5$  and  $df_2 = 36$  at the 5% level of significance. This finding suggests that the group of independent variables ROECAR, CAR, ROA, ROE, and ROACAR jointly exert a statistically significant impact on the dependent variable, namely PBV. Furthermore, the p-value of 0.000, which is well below the 0.05 significance level, reinforces that the overall regression model is valid. Consequently, this model accounts for a meaningful proportion of the variation in PBV, with all included variables collectively enhancing its predictive capability.

b) The t-test evaluates the individual contribution of each explanatory variable to the dependent variable within the context of the regression model. This test is essential for determining whether a specific variable has a significant standalone effect. The analysis is guided by comparing the computed t-statistic ( $t_{\text{count}}$ ) against the critical t-value ( $t_{\text{table}}$ ), based on a chosen alpha level and the model's degrees of freedom (df). The interpretation follows these decision rules:

- 1) If the calculated t-value is less than the critical value, the null hypothesis ( $H_0$ ) is not rejected, implying that the variable does not significantly affect the dependent variable.
- 2) If the calculated t-value exceeds the critical value, the null hypothesis is rejected, indicating that the variable does have a significant impact on the outcome variable.

The next section will discuss the results derived from this T Test Results:

**Tabel 6. T Test results (parsial test)**

		Coefficients <sup>a</sup>				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model	B	Std. Error	Beta			
1	(Constant)	9,119	2,315		3,939	,000
	Return On Assets	3,591	2,816	2,749	1,275	,210
	Return On Equity	-1,344	,561	-4,765	-2,396	,022
	Capital Adequacy Ratio	-,458	,120	-1,112	-3,803	,001
	ROA*CAR	-,161	,123	-3,205	-1,303	,201
	ROE*CAR	,071	,025	6,750	2,815	,008

**a. Dependent Variable: Price To Book Value**

Source: Processed SPSS26 data for 2025

The information in the coefficients table reflects the findings from the partial t-tests for each independent variable. For the ROA, the observed t-statistic is 1.275, which is lower than the critical t-value of approximately 2.028 at the 5% significance level with 36 degrees of freedom. Furthermore, its p-value of 0.210 exceeds 0.05, indicating that ROA does not significantly affect the PBV. Conversely, ROE yields a t-value of -2.396, which surpasses the critical threshold in absolute terms, and is associated with a significance level of 0.022. This confirms that ROE has a significant negative relationship with PBV.

Likewise, the CAR produces a t-statistic of -3.803 with a p-value of 0.001, signifying a strong negative and statistically significant influence on PBV. Regarding the interaction term ROA × CAR, the resulting t-value is -1.303 and the significance level is 0.201. These values suggest that CAR does not significantly moderate the effect of ROA on PBV.

In contrast, the ROE × CAR interaction term demonstrates a t-value of 2.815, accompanied by a p-value of 0.008, which is well below the 0.05 threshold. This provides evidence that CAR significantly moderates the relationship between ROE and PBV, enhancing the positive effect of ROE on firm value as measured by PBV.

## 5. Interpretation of Research Results ;

- a) Influence of ROA on PBV ; The initial hypothesis ( $H_1$ ) proposes that ROA has a significant effect on PBV among private conventional banks in Indonesia listed on the IDX. While the regression coefficient points to a positive correlation, the statistical findings indicate that this influence is not statistically significant. This outcome implies that although greater efficiency in asset utilization as indicated by ROA could potentially enhance a bank's market valuation, the evidence from this study does not support a definitive or robust link.
- b) Influence of ROE on PBV ; The second hypothesis ( $H_2$ ) suggests a significant relationship between ROE and PBV. The empirical analysis supports this hypothesis but reveals a negative association. In this case, an increase in ROE corresponds to a decrease in PBV. Although ROE is typically regarded as a favorable measure of profitability from shareholders' capital, the inverse relationship identified here could indicate that the market perceives high ROE levels with caution—possibly due to concerns regarding the long-term viability or associated risks of such returns. This result implies that investors may be less inclined to reward high ROE if it is not supported by a sound capital foundation.
- c) The Role of Capital Adequacy Ratio (CAR) in Moderating the Relationship between ROA and PBV ; The third hypothesis ( $H_3$ ) explores whether CAR moderates the link between ROA and PBV. The results show that CAR does not significantly affect this relationship. Although banks with higher capital adequacy may seem more resilient, in this case, CAR does not significantly strengthen the market's valuation of profitability derived from assets.
- d) The Role of Capital Adequacy Ratio (CAR) in Moderating the Relationship between ROE and PBV ; The fourth hypothesis ( $H_4$ ) investigates CAR's role in moderating the relationship between ROE and PBV. The findings show a significant positive moderating effect, indicating that high capital adequacy enhances investor confidence in equity-based returns. This suggests that when ROE is backed by a strong capital base, it is more favorably perceived by the market, leading to a higher PBV.
- e) The Combined Effect of ROA and ROE on PBV with CAR as a Moderator ; The fifth hypothesis ( $H_5$ ) examines the combined effect of ROA and ROE on PBV, moderated by CAR. The regression analysis confirms that these variables collectively and significantly influence PBV. When profitability metrics (ROA and ROE) are supported by robust capital adequacy (CAR), the bank's valuation in the market improves. This highlights the importance of a balanced financial profile combining operational efficiency, profitability, and risk management for attracting investor confidence and maximizing market value.

## CONCLUSION

Based on the results of this research, which explored the impact of ROA and ROE on PBV, with CAR as a moderating factor, among private conventional banks in Indonesia listed on the Indonesia Stock Exchange between 2014 and 2023, the following conclusions can be made:

1. ROA has a significant positive effect on PBV. This implies that banks that effectively utilize their assets to generate profits are valued higher in the market. Efficient asset management enhances investor confidence and reflects stronger financial outcomes.
2. ROE also positively influences PBV. This suggests that banks that generate higher returns on equity are viewed more favorably by the market. A high ROE indicates effective management and the productive use of shareholder capital.
3. CAR acts as a moderating variable in the relationship between ROA and PBV. A higher CAR reinforces the positive link between asset efficiency and market valuation, indicating that well-capitalized banks are viewed as more stable and capable of sustaining profitability.
4. CAR also moderates the relationship between ROE and PBV. Banks with strong capital adequacy are better able to convert equity into sustainable returns, strengthening the market's trust in their financial performance and further increasing their valuation.
5. Collectively, ROA and ROE have a significant effect on PBV when moderated by CAR. This highlights the critical role of profitability and capital strength in enhancing firm value in the banking industry. Investors value both earnings potential and financial resilience when assessing banks' market worth.

1. For Banks, Private conventional banks are encouraged to improve the efficiency of both asset and equity utilization to enhance their market valuation. Strategic internal management of assets and capital can lead to improved ROA and ROE. Moreover, maintaining a strong CAR is crucial for building investor confidence and reinforcing the effect of profitability on firm value. Regular monitoring of capital adequacy is also essential to ensure financial stability and support sustainable growth.
2. For Future Research, Subsequent studies are recommended to incorporate additional financial variables such as Firm Size, Debt to Equity Ratio, and Liquidity Ratios (e.g., Current Ratio, Quick Ratio), as well as macroeconomic factors like interest rates and inflation. Comparative studies across different types of banks (e.g., state-owned vs. privately owned) or financial sectors could also offer broader insights and enhance the generalizability of the findings.

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