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The Effect of Operational Efficiency Ratio (BOPO) and Credit Loss Provision (CKPN) on Company Value at PT Bank Negara Indonesia (Persero) Tbk for the Period 2016–2025

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Abstract : *This study aims to determine the effect of the Operational Efficiency Ratio (BOPO) and Credit Loss Provision (CKPN) on Company Value measured using Price to Book Value (PBV) at PT Bank Negara Indonesia (Persero) Tbk for the period 2016–2025, both partially and simultaneously. The research method used is a quantitative approach with secondary data in the form of BNI's annual financial statements for ten years, which are analyzed using descriptive statistics, classical assumption tests, multiple linear regression, and hypothesis testing through t-tests and F-tests. The results of the study indicate that partially, BOPO does not have a significant effect on PBV (t count -0.623 < t table 2.365; sig. 0.553 > 0.05), as well as CKPN (t count -0.927 < t table 2.365; sig. 0.385 > 0.05). Simultaneously, BOPO and CKPN also did not have a significant effect on PBV (F count 0.964 < F table 4.74; sig. 0.427 > 0.05), which indicates that investors did not make these two ratios the main consideration in assessing the company in this research period.*

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Introduction

State-Owned Banks (BUMN) are banks whose majority shares are owned by the Indonesian government through the Ministry of State-Owned Enterprises, thus playing a strategic role in maintaining the stability of the national financial system and supporting economic growth. The three largest state-owned banks that form the backbone of the national banking sector are Bank Rakyat Indonesia (BRI), Bank Mandiri, and Bank Negara Indonesia (BNI). All three are included in the Bank Group category based on Core Capital (KBMI) 4, so their performance significantly influences the development of the Indonesian banking industry. Stock price data for these three banks for the period 2021–2025 shows that BNI has the most interesting fluctuation pattern to study: BNI's share price rose sharply from Rp6,570 in 2021 to Rp9,225 in 2022, then declined successively to Rp5,375 (2023), Rp4,350 (2024), and Rp4,370 (2025). The pattern of high increases followed by significant decreases indicates a change in the company's value which is interesting to analyze further in relation to the operational efficiency ratio (BOPO) and credit loss provisions (CKPN).

Table 1. Stock Prices of the Three Largest State-Owned Banks in Indonesia 2021–2025

Year	BNI	Independent	BRI
2021	6,570	7,025	4.110
2022	9,225	9,925	4,940
2023	5,375	6,050	5,725
2024	4,350	5,700	4,080
2025	4,370	5,100	3,660

Source: Indonesia Stock Exchange (processed data).

Compared to similar state-owned banks, BNI experienced the largest share price decline after reaching its peak in 2022, from Rp9,225 to Rp4,370 in 2025. Bank Mandiri experienced a relatively more stable decline, while BRI had a lower share price level with less fluctuation than BNI. Therefore, BNI was chosen as the research object due to its relatively high share price volatility, thus providing a clearer picture for further testing the relationship between BOPO and CKPN to company value as measured by Price to Book Value (PBV).

In addition to the stock price phenomenon, BNI is also facing challenges and opportunities that are representative of the national banking industry. The bank is actively pursuing digital transformation, but on the other hand, it still faces complex credit risk management issues, one of which is its involvement in the syndicated loan of PT Sri Rejeki Isman Tbk (Sritex), which continues to attract public attention. BNI's governance and risk management have also been in the spotlight in recent years; according to BNI's 2024 Annual Report, 147 cases of banking violations/fraud involving employees were recorded throughout the year, with 74 employees being subject to termination sanctions (Purwantono, 2025). This phenomenon adds a dimension of operational risk that investors consider when assessing the quality of bank governance, in addition to financial ratios such as BOPO and CKPN, which are the main focus of this study.

The banking industry occupies a central position in a country's financial system due to its function as an intermediary institution that collects funds from the public in the form of deposits and redistributes them in the form of credit to improve the standard of living of the wider community (Kasmir, 2019). However, the national banking industry is currently also faced with the challenge of digital transformation, which requires banks to be more efficient in managing their operational costs to remain competitive. Operational efficiency, reflected in the Operating Expenses to Operating Income (BOPO) ratio, is one of the main benchmarks for assessing bank performance. The lower the BOPO value, the more efficient the bank's performance, resulting in increased profits, which in turn can encourage investment interest and increase the company's value, as measured by PBV. Conversely, a high BOPO indicates swelling operational costs, resulting in decreased profits and potentially lower company value.

In addition to BOPO, the Credit Loss Provision or Allowance for Impairment Losses (CKPN) variable was also chosen because it reflects the amount of reserves a bank must set aside to anticipate the risk of losses due to non-performing loans. The higher the CKPN value, the greater the credit risk faced by the bank, resulting in a greater need for reserves. This ultimately reduces the company's profits and can impact investor perceptions of the company's future prospects. Conversely, managing CKPN at a reasonable level indicates good credit quality, which can maintain profits and potentially increase the company's value (Hery, 2016).

Based on the description, the research problem formulation is: (1) is there an influence of BOPO on the Company Value of PT Bank Negara Indonesia (Persero) Tbk for the period 2016–2025; (2) is there an influence of CKPN on Company Value in the same period; and (3) do BOPO and CKPN simultaneously influence Company Value. In line with the formulation of the problem, this study aims to determine the influence of BOPO, the influence of CKPN, and the simultaneous influence of both on

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the Company Value of PT Bank Negara Indonesia (Persero) Tbk for the period 2016–2025. This research is important because it provides information regarding the relationship between operational efficiency ratios and credit risk with the value of banking companies, as well as being a reference for further research. The novelty of this research lies in the joint testing of BOPO and CKPN on PBV with the object of PT Bank Negara Indonesia (Persero) Tbk for ten years of observation (2016–2025), a period that includes the dynamics of post-pandemic recovery and the challenges of digital transformation of national banking.

Research methods

This study uses a quantitative approach with the research object of PT Bank Negara Indonesia (Persero) Tbk for the period 2016–2025. The quantitative approach was chosen because this study uses data in the form of figures obtained from the company's financial statements, which are then analyzed statistically to test the formulated hypotheses (Sugiyono, 2019). The independent variables in this study are the Operational Efficiency Ratio (BOPO) and Credit Loss Provision (CKPN), while the dependent variable is Company Value proxied by Price to Book Value (PBV).

BOPO is measured by comparing Operating Expenses to Operating Income, multiplied by 100%. CKPN is measured by comparing Allowance for Impairment Losses to Total Loans, multiplied by 100%. Company Value (PBV) is measured by comparing Share Price to Book Value per Share (PBVS). All three variables are measured using a ratio scale.

The population of this study is all annual financial reports of PT Bank Negara Indonesia (Persero) Tbk. The sample was determined using a saturated sampling technique (total sampling), namely all annual financial report data that met the research criteria were sampled, with the following criteria: the company is listed on the Indonesia Stock Exchange, consistently publishes annual financial reports for the period 2016–2025, and the financial reports are fully available through the company's official website. Based on these criteria, 11 years of observation were obtained which resulted in 10 time series data points (2016–2025) after the ratio calculation process. The data used are secondary data collected through official BNI financial report documentation (www.bni.co.id and www.idx.co.id), literature studies, and scientific journal searches.

The data were analyzed using the SPSS version 25 application through several stages. First, descriptive statistical analysis to determine the minimum, maximum, average (mean), and standard deviation values of each variable. Second, the classical assumption test consisting of a normality test (Kolmogorov-Smirnov), a multicollinearity test (tolerance value and Variance Inflation Factor/VIF), a heteroscedasticity test (scatterplot graph), and an autocorrelation test (runs test). Third, multiple linear regression analysis with the equation Y = a + b1X1 + b2X2, where Y is the Company Value (PBV), a is a constant, b1 and b2 are regression coefficients, X1 is BOPO, and X2 is CKPN (Ghozali, 2018). Fourth, the coefficient of determination test (Adjusted R Square) to determine the magnitude of the contribution of the independent variables to the dependent variable. Fifth, hypothesis testing through the t-test (partial) to test the influence of each independent variable, and the F-test (simultaneous) to test the influence of BOPO and CKPN together on PBV, at a significance level of 5%.

Results and Discussion

Research Data Description

1. Operational Efficiency Ratio (BOPO)

Table 1. Calculation of the Operational Efficiency Ratio (BOPO) of PT Bank Negara Indonesia (Persero) Tbk for the 2016–2025 Period

Year	Total Operating Expenses (Rp)	Total Operating Income (Rp)	BOPO (%)
2016	36,860,512	50,333,488	73.23
2017	39,598,869	55,939,047	70.79
2018	43,324,826	62,063,864	69.81
2019	49,874,925	68,014,819	73.33

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Year	Total Operating Expenses (Rp)	Total Operating Income (Rp)	BOPO (%)
2020	50,916,235	65,280,329	78.00
2021	53,263,506	65,613,010	81.18
2022	49,917,082	72,737,887	68.63
2023	54,724,902	80,001,737	68.40
2024	60,761,511	91,741,000	66.23
2025	67,148,875	90,688,137	74.04

Source: Financial Report of PT Bank Negara Indonesia (Persero) Tbk (processed data).

PT Bank Negara Indonesia (Persero) Tbk's BOPO reached its highest level in 2021 at 81.18% and its lowest level in 2024 at 66.23%. During the 2016–2019 period, BOPO tended to decline, then rose again in 2020–2021 to reach its peak, before declining again in 2022–2024 and rising slightly in 2025 to 74.04%. This pattern indicates that BNI's operational efficiency fluctuates in line with pandemic pressures and the post-pandemic economic recovery process.

2. Credit Loss Provision (CKPN)

Table 2. Calculation of Credit Loss Provision (CKPN) for PT Bank Negara Indonesia (Persero) Tbk for the 2016–2025 Period

Year	Allowance for Impairment Losses (Rp)	Total Credit (Rp)	CKPN (%)
2016	16,680,865,000,000	393,275,392,000,000	4.24
2017	14,523,585,000,000	441,313,566,000,000	3.29
2018	14,891,609,000,000	512,778,497,000,000	2.90
2019	16,908,871,000,000	556,770,947,000,000	3.04
2020	44,277,986,000,000	586,206,787,000,000	7.55
2021	50,294,886,000,000	582,294,886,000,000	8.64
2022	50,333,988,000,000	646,188,313,000,000	7.79
2023	47,158,131,000,000	695,084,769,000,000	6.78
2024	38,684,520,000,000	775,871,778,000,000	4.99
2025	35,860,626,000,000	899,530,691,000,000	3.99

Source: Financial Report of PT Bank Negara Indonesia (Persero) Tbk (processed data).

The Allowance for Impairment Losses (CKPN) declined from 2016–2018 to a low of 2.90%, then increased rapidly each year, reaching a peak of 8.64% in 2021. After peaking, the Allowance for Impairment Losses (CKPN) declined consistently from 2022–2025 to 3.99%. The sharp increase in the CKPN in 2020–2021 was in line with the increase in credit reserves due to the pressure the COVID-19 pandemic had on banking asset quality.

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3. Company Value (PBV)

Table 3. Calculation of Company Value (PBV) of PT Bank Negara Indonesia (Persero) Tbk for the 2016–2025 Period

Year	Stock Price (Rp)	Company Book Value (Rp)	PBV (times)
2016	5,525	83,567,877,656,458	1.23
2017	9,900	94,035,905,656,458	1.96
2018	8,800	103,607,724,656,458	1.58
2019	7,850	116,916,854,656,458	1.25
2020	6.175	103,634,405,656,458	1.11
2021	6,750	119.470.244.656.458	1.05
2022	9,225	131,795,957,656,458	1.31
2023	5,375	145,967,864,312,916	1.37
2024	4,350	158,139,077,312,916	1.03
2025	4,370	167,996,363,312,916	0.97

Source: Financial Report of PT Bank Negara Indonesia (Persero) Tbk (processed data).

The highest PBV value occurred in 2017 at 1.96 times, then declined in 2018–2021 to 1.05 times. It increased again in 2022–2023 to 1.37 times, before declining again in 2024–2025, reaching its lowest point during the study period, at 0.97 times in 2025.

Statistical Analysis Results Description

Table 4. Results of Descriptive Statistical Analysis

Descriptive Statistics

	N	Minimum	Maximum	Mean	Standard Deviation
BOPO	10	66.23	81.18	72,3639	4,59706
CKPN	10	2.90	8.64	5,3211	2,17188
PBV	10	,97	1.96	1.2874	,30032
Valid N (listwise)	10				

The Operational Efficiency Ratio (BOPO) variable (X1) during the observation period showed a minimum value of 66.23 and a maximum value of 81.18. The average value (mean) was 72.3639 with a standard deviation of 4.59706. A standard deviation value that is smaller than the average value indicates that the Operational Efficiency Ratio (BOPO) data spread during the observation period is relatively homogeneous, meaning there is no significant gap between the data.

The Credit Loss Provision (CKPN) variable (X2) during the observation period showed a minimum value of 2.90 and a maximum value of 8.64, with an average of 5.3211 and a standard deviation of 2.17188. Similar to the Operational Efficiency Ratio, the standard deviation value of the Credit Loss Provision (CKPN) which is smaller than the average value indicates that the data variation in this variable is also relatively low, so it can be said that there is no significant data deviation.

The Firm Value (PBV) variable as the dependent variable has a minimum value of 0.97 and a maximum value of 1.96, with an average of 1.2874 and a standard deviation of 0.30032. The average value is greater than the standard deviation indicating that the Price to Book Value (PBV) data during the 2016–2025 observation period is also quite evenly distributed, with relatively low fluctuations from year to year.

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Classical Assumption Test

1. Normality Test

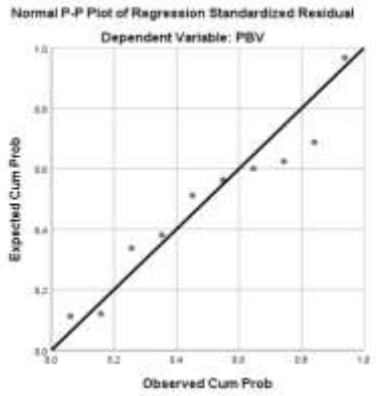


Figure 1. Normality Test Results

Normal probability plot graphIt can be seen that the points are spread around a vertical or diagonal line, which suggests that the data used is normally distributed. To confirm this, the Kolmogorov-Smirnov test can be used.

Table 5. Results of Descriptive Statistical Analysis

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		10
Normal Parametersa,b	Mean	,0000000
	Standard Deviation	,26593086
Most Extreme Differences	Absolute	,189
	Positive	,189
	Negative	-,117
Test Statistics		,189
Asymp. Sig. (2-tailed)		,200c,d

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.
Source: data processed using SPSS 25

Based on the results of the Kolmogorov-Smirnov test with an Asymp. Sig. (2-tailed) value of 0.200, it can be concluded that the residual data in the regression model is normally distributed. This result indicates that the regression model in this study has met the assumption of normality—which is an important requirement in multiple linear regression analysis. This result is also in line with the results of previous tests using the Histogram and Normal P-Plot graphs, which showed that the distribution pattern of the residual data follows a diagonal line and forms a normal curve.

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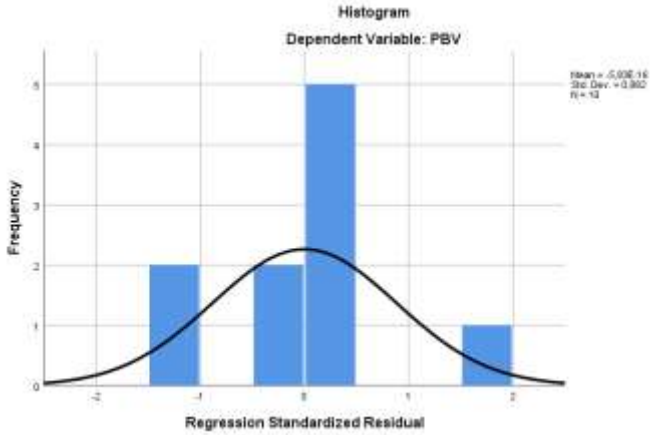


Figure 2. Histogram Graph of Normality Test Results

Based on the image, it can be seen that the line above is shaped like a bell, which means that the data used in this study is normally distributed.

2. Heteroscedasticity Test

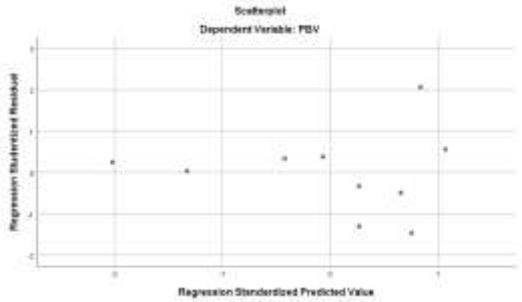


Figure 3. Scatterplot Graph of Heteroscedasticity Test Results

Based on the scatter plot graph, the data points are randomly distributed and do not form a specific pattern (such as a line, wave, or fan). The points are spread both above and below the zero axis. This condition indicates that there is no clear pattern in the residual distribution, and the residual variance tends to be constant. Based on the scatter plot graph, it can be concluded that there are no symptoms of heteroscedasticity in the regression model, so the heteroscedasticity assumption has been met.

3. Multicollinearity Test

Table 6. Multicollinearity Test Results

Coefficientsa

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	BOPO	,867	1,154
	CKPN	,867	1,154

a. Dependent Variable: PBV

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The tolerance value for both independent variables is 0.867 (> 0.10) and the VIF value is 1.154 (< 10), so it can be concluded that there are no symptoms of multicollinearity between the BOPO and CKPN variables in the regression model of this study.

4. Autocorrelation Test

Table 7. Autocorrelation Test Results*Run Test*

Runs Test

	Unstandardized Residual
Test Valuea	,02871
Cases < Test Value	5
Cases >= Test Value	5
Total Cases	10
Number of Runs	5
Z	-,335
Asymp. Sig. (2-tailed)	,737

a. Median

Source: data processed using SPSS 25

The results of the runs test show an Asymp. Sig. (2-tailed) value of 0.737, which is greater than 0.05, so it can be concluded that there is no autocorrelation in the regression model of this study.

Multiple Linear Regression Test

Table 8. Multiple Linear Regression Test Results

Coefficientsa

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2,591	1,625		1,595	,155
	BOPO	-,015	,023	-,224	-,623	,553
	CKPN	-,046	,050	-,333	-,927	,385

a. Dependent Variable: PBV

Based on the results of the coefficient calculations above, the following regression equation is obtained:

$$Y = a + b1X1 + b2X2Y = 2.591 – 0.015\ X1 – 0.046\ X2$$

The constant value of 2.591 indicates that if the Operational Efficiency Ratio (BOPO) and Credit Loss Provision (CKPN) are considered constant or zero, then the Price to Book Value (PBV) value is estimated at 2.591. The Operational Efficiency Ratio (BOPO) coefficient value of -0.015 indicates that every 1 unit increase in BOPO will decrease the Price to Book Value (PBV) by 0.015 units assuming other variables remain constant. Finally, the Credit Loss Provision (CKPN) coefficient value of -0.046 indicates that every 1 unit increase in CKPN will decrease the Price to Book Value (PBV) by 0.046 units assuming other variables remain constant. According to Hery, the increase in credit loss reserves has a negative impact on the company's performance and value, so the direction of the negative relationship between CKPN and PBV in this study is in line with the theory.

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Coefficient of Determination Test R^2

Table 9. Results of the Determination Coefficient Test

Model Summary

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	,465a	,216	-,008	,30154

a. Predictors: (Constant), CKPN, BOPO

From the table above, the R Square value is 0.216, which indicates that the Operational Efficiency Ratio (BOPO) and Credit Loss Provision (CKPN) variables together are able to explain the variation in Company Value (PBV) by 21.6%, while the remaining 78.4% is influenced by other variables or factors outside this research model, such as profitability, macroeconomic conditions, and market sentiment. Considering that the number of independent variables in this study is more than one, the Adjusted R Square value is more appropriate as a reference for interpretation than the usual R Square, because the value has been adjusted to the number of independent variables and the sample size used. The Adjusted R Square value in this study of -0.008 indicates that more conservatively, the Operational Efficiency Ratio (BOPO) and Credit Loss Provision (CKPN) variables are practically unable to explain the variation in Company Value (PBV) — this negative value indicates that the addition of these two predictor variables to the model has not provided a significant contribution, even lower than the model without any predictors at all, so that almost all of the PBV variation is explained by factors outside this research model.

Partial Test (t-Test)

Table 10. t-Test Results

Coefficientsa

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	2,591	1,625		1,595	,155
	BOPO	-,015	,023	-,224	-,623	,553
	CKPN	-,046	,050	-,333	-,927	,385

a. Dependent Variable: PBV

Source: data processed using SPSS 25

Based on the table above, the significance value for each variable of Operational Efficiency Ratio (BOPO) and Credit Loss Provision (CKPN) is 0.553 and 0.385, so that the BOPO value is 0.553 > 0.05, as well as the CKPN value is 0.385 > 0.05, and the t table value is 2.365, while the calculated t value of each variable is -0.623 and -0.927, so that from this t test the following conclusions are obtained:

1. The Operational Efficiency Ratio (BOPO) variable has a significance value of 0.553 > 0.05 and a calculated t value of -0.623 < t table 2.365, so that BOPO has no effect on Company Value (PBV), so Ho is accepted and Ha is rejected.
2. The Credit Loss Provision (CKPN) variable has a significance value of 0.385 > 0.05 and a calculated t value of -0.927 < t table 2.365, so that CKPN has no effect on Company Value (PBV), so Ho is accepted and Ha is rejected. In line with Hery's research in his book Financial Statement Analysis: Integrated and Comprehensive Edition, which states that increasing credit loss reserves has a negative impact on company performance and value.

Simultaneous Test (F Test)

Table 12. F Test Results

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,175	2	,088	,964	,427b
	Residual	,636	7	,091		
	Total	,812	9			

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a. Dependent Variable: PBV
b. Predictors: (Constant), CKPN, BOPO

Based on the results of the table above, it is known that the calculated F is 0.964 with a significance value of 0.427. Because the calculated F value of 0.964 is smaller than the F table of 4.74 and the significance value of 0.427 is greater than 0.05, it can be concluded that simultaneously the Operational Efficiency Ratio (BOPO) and Credit Loss Provision (CKPN) do not have a significant effect on Company Value (PBV). Thus, the third hypothesis (H3) which states that BOPO and CKPN simultaneously affect Company Value (PBV) in this study is rejected.

However, it should be noted that the F-test significance value of 0.427 is still quite far from the 0.05 threshold, so this result consistently indicates that the two independent variables are not able to adequately explain the variation in Firm Value (PBV). This is most likely due to the relatively limited number of research samples, namely n = 10, which affects the statistical power of this test, as well as by the negative Adjusted R Square value (-0.008) which indicates the low explanatory power of the model on the dependent variable.

Discussion

1. **The Influence of BOPO on Company Value**

   The finding that BOPO had no significant effect on PBV indicates that the reduction in operating costs achieved by BNI during the study period was not strong enough to influence investors' perceptions of the company's value. This finding aligns with the findings of Mustikaweni et al. (2024), who showed that the effect of BOPO on company value (PBV) in the banking sector tends to be inconsistent when not mediated by profitability variables such as ROA, as investors consider external factors, such as macroeconomic pressures and market sentiment, more than operational efficiency alone.

2. **The Influence of CKPN on Company Value**

   Although theoretically, an increase in the CKPN reflects an increase in credit risk that can suppress profits and reduce company value (Hery, 2016), the results of this study indicate that this effect is not statistically significant at BNI during 2016–2025. This is in line with the view of Kabak et al. (2026) that the effect of CKPN on company value can depend on other moderating factors, such as institutional ownership structure, so without considering these factors, the relationship between CKPN and PBV tends to be weak and not directly significant.

3. **The Simultaneous Effect of BOPO and CKPN on Company Value**

   The simultaneous test results show that BOPO and CKPN together can only explain a small portion of the variation in PBV, with a statistically insignificant effect. This confirms the findings of Hidayah and Sakti (2023) that banking financial performance tends to influence firm value indirectly through intervening variables such as profitability, rather than directly through efficiency ratios and credit risk alone. Therefore, BNI's firm value in the 2016–2025 period is more influenced by factors other than BOPO and CKPN, such as profitability, liquidity, and capital market sentiment.

Conclusion

This study examined the relationships of the Operational Efficiency Ratio (BOPO) and Credit Loss Provision (CKPN) with firm value, measured by Price to Book Value (PBV), at PT Bank Negara Indonesia (Persero) Tbk during the 2016–2025 period. The partial test results showed that BOPO was not significantly associated with PBV ($t = -0.623$; $p = 0.553$), while CKPN also showed no statistically significant association with PBV ($t = -0.927$; $p = 0.385$). Similarly, the simultaneous test did not identify a statistically significant relationship between BOPO and CKPN jointly and PBV ($F = 0.964$; $p = 0.427$). The model's adjusted R^2 was -0.008, indicating that the model did not demonstrate explanatory improvement over a model without the predictors after adjustment for the number of variables and observations. These findings indicate that the analysis did not identify statistically significant relationships between BOPO, CKPN, and PBV within the observed dataset. However, the results should

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not be interpreted as proof that these variables have no relationship with firm value in other periods or settings.

This study has important limitations. It examines only one company, PT Bank Negara Indonesia (Persero) Tbk, and uses ten annual observations from 2016 to 2025. The small sample limits the statistical power of the analysis and the extent to which the findings can be generalized to other banks. In addition, the model includes only BOPO and CKPN, while firm value may also be associated with other financial, company-specific, and macroeconomic factors. Therefore, the results should be interpreted cautiously and within the scope of the data and model used.

From a practical perspective, BNI management may continue to monitor operational efficiency and credit risk management as part of its broader financial performance and risk assessment. Investors may also consider BOPO and CKPN alongside other financial indicators, market conditions, and the bank's long-term prospects when evaluating investment decisions. These considerations are general recommendations and are not direct effects established by the regression results. Future research could extend the observation period, include a larger sample of banks, and compare state-owned and private banks listed on the Indonesia Stock Exchange. Further studies may also incorporate additional theoretically relevant variables, such as profitability, liquidity, capital adequacy, company size, and macroeconomic conditions, to assess whether the relationships differ across companies and periods.

Bibliography

Ghozali, I. (2018). *Aplikasi analisis multivariate dengan program IBM SPSS 25* (Edisi ke-9). Universitas Diponegoro.

Hery. (2016). *Analisis laporan keuangan: Integrated and comprehensive edition*. Gramedia Widiasarana Indonesia.

Hidayah, R., & Sakti, R. K. (2023). Analisis pengaruh kinerja keuangan perbankan terhadap nilai perusahaan dengan profitabilitas sebagai variabel intervening. *Contemporary Studies in Economic, Finance and Banking*, *2*(1), 72–82. https://doi.org/10.21776/csefb.2023.02.1.07

Kabak, Y., Irvan Nur, M., & Herman, H. H. (2026). Kedudukan strategis kepemilikan institusional dalam memoderasi pengaruh cadangan kerugian penyusutan nilai terhadap nilai industri. *Nusantara Hasana Journal*, *5*(10).

Kasmir. (2019). *Analisis laporan keuangan*. Rajawali Pers.

Mustikaweni, R., Tesniwati, R., Kustamtinah, L., & Dahliawati, A. (2024). The effect of NPL, LDR, and BOPO on company value (PBV) through ROA and company value (PBV) on investment decisions (PER). *Indo-Fintech Intellectuals: Journal of Economics and Business*, *4*(2), 105–116. https://doi.org/10.54373/ifijeb.v4i2.1144

Nuryani, A. (2022). Pengaruh cost of fund dan penyaluran kredit terhadap return on assets pada BPR Gitamakmur Utama. *Jurnal ARASTIRMA Universitas Pamulang*, *2*(1), 71–79.

Purwantono, I. (2025, 5 Juni). Terungkap 147 kasus fraud di 2024, BNI pecat 74 pegawai untuk tegaknya integritas. *Inilah.com*. https://www.inilah.com/terungkap-147-kasus-fraud-di-2024-bni-pecat-74-pegawai-untuk-tegaknya-integritas

Sugiyono. (2019). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Alfabeta.

https://doi.org/10.61536/escalate.v4i4.793
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