EARNING MODERATES THE INFLUENCE OF CAR, NPL, AND BOPO ON COMPANY VALUE IN CONVENTIONAL BANKS LISTED ON THE IDX FOR THE 2020-2022 PERIOD

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ABSTRACT

The goal of research on traditional commercial banks listed on the Indonesia Stock Exchange (IDX) is to use earnings as a moderator to ascertain the impact of the capital adequacy ratio (CAR), non-performing loan (NPL), and BOPO on the value of the company. Variables This study uses a quantitative approach and sample data collection through purposive sampling. The samples obtained for this study are 69 samples that meet the standards of the Indonesia Stock Exchange (IDX) and financial statements for the 2020-2022 period. Classical hypothesis testing and moderate regression analysis (MRA) methods were used to analyze the results of this study. The results showed that the Capital Adequacy Ratio (CAR) did not have a significant effect on the value of the company, and non-performing loans (NPL) did not have a significant effect on the value of the company and operating costs. (BOPO) does not have a significant influence on the value of the company. Capital Adequacy Ratio (CAR) can be changed and affect company value, profit cannot moderate the impact of non-performing loans (NPL) on company performance Product value cannot reduce Operating Costs and Operating Income (BOPO) to company value.

INTRODUCTION

The organization that drives the economic growth of a country and oversees the monetary policy of the central bank is the banking sector. Banking Law Number 10 of 1998 states that a bank is a commercial organization that collects money from the general public, collects savings, and then disseminates these resources through investment, credit applications, and other means in order to improve the standard of living of a community. a large number of people.

Indonesia's largest banks continue to show improved performance even amid complex macroeconomic conditions such as rising interest rates, inflation, and rising geopolitical tensions. Five banks achieved double-digit profit growth. All three banks are state-owned banks and classified as private banks. The five banks made a total profit of IDR 139.9 trillion, 70% of which came from state-owned banks. PT Bank Rakyat Indonesia (Persero) Tbk (BBRI) recorded the highest profit growth among Indonesia's five major banks until the end of September 2023. Meanwhile, PT Bank Mandiri (Persero) Tbk (BMRI) is ranked second (Puspadini, 2023).

The economies of many countries are harmed by unhealthy banking systems (Alabdullah et al., 2020; Beck, 2020; Berger et al., 2020; Perwej, 2020; Wang et al., 2022). The existence of a healthy bank is a prerequisite for a healthy economy (Alam et al., 2021; Naseer et al., 2023; Ofosu-Mensah Ababio et al., 2021; Rodrigues & Plotkin, 2020; Vu, 2020). Along with the increasingly widespread digitalization of the banking industry, the possibility of being attacked by hackers is also getting bigger. The Financial Services Authority (OJK) revealed that the development of digitalization of the banking industry also increases banking cybersecurity risks. Two issues that plague bank digitalization are risk management and security of bank customer data. The rules outlined in the three POJKs are intended to anticipate

digital trends so that banks can get guidance to anticipate the risk of cyber attacks that are happening in banks. The next issue is the security of customer data, including data submitted by customers to banks and customer transaction data. Since the Consumer Personal Data Protection Act has not yet been passed, personal data protection is an issue that requires special attention. and risk management ranging from the use of technology in the banking system and the risk of data breaches to the use of outsourcing for customer data storage. Next is risk management ranging from the use of technology in the banking system and the risk of data breaches to the use of outsourcing customer data storage.

The high value of the company can be said to successfully confirm the market against the expectations of the company's performance in the future. Good performance will increase the value of the company. The value of the company depends on the performance that the company achieves. Indirectly, this can be seen from the ability of shareholders to choose companies that perform well.

In a financial statement, profitability is said to be a benchmark for company performance that is the view of investors. Profit or revenue is the total net profit from the operations of a business expressed in financial terms over a certain period (Dirman, 2020; Haig, 2020; Ichsan et al., 2021; Ledley et al., 2020; Nariswari & Nugraha, 2020). The higher the profit, the lower the risk of the company experiencing financial problems.

The role of banking is very helpful for modern financial needs, we can see that banking is growing very rapidly, this can be said to be a benchmark for the progress of a country. As a credit service provider, banks are expected to have a credit risk score of less than 5% in accordance with Bank Indonesia regulations in order to understand the proportion of non-performing loans. The standard for measuring bank credit risk management is that the higher the credit distribution, the higher the credit risk received by the bank. The large number of Non-Performing Loans (NPL) is one of the causes of bank difficulties in disbursing credit (Alshebmi et al., 2020; Kumar et al., 2020; Msomi, 2022; Suardika & Dewi, 2021; Syaputra & Winarso, 2021).

Non-performing loan (NPL) is the total number of loans that experience problems compared to the total loans that have been disbursed to borrowers. When the amount of loan disbursed by a bank exceeds the amount of loan given to the borrower, the NPL ratio of the bank tends to increase. In a study by Haq et al. (2022) and Nugroho & Rachmaniyah (2020), it was found that NPL has an impact on company value. However, the results of the study contradict previous research by Debora (2021) and Satria & Hatta (2017) which concluded that non-performing loans do not affect company value.

The Capital Adequacy Ratio (CAR) is a metric that compares weighted assets to available capital (Alnajjar & Othman, 2021; Dao & Nguyen, 2020; Harkati et al., 2020). The definition of experts leads one to the conclusion that the capital adequacy ratio demonstrates a bank's capacity to assess if its capital is adequate to sustain its assets or risks, like lending to clients. If a bank has enough capital to cover credit losses, it can be determined by looking at its capital adequacy ratio. It can be said that the higher the value of CAR means that the bank is getting healthier (Mojambo et al., 2020; Nabella et al., 2023; Nguyen, 2021; Shair et al., 2021). The higher the CAR value, the higher the health of the bank, because the greater the possibility of a decrease in the value of bank assets due to non-performing assets (Alwi et al., 2021; Anggriani & Muniarty, 2020; Ikhsan et al., 2022).

There are indicators to measure bank efficiency are operating expenses and operating profit (BOPO). A lower BOPO score indicates a more efficient managed bank (Luh et al., 2020; Nasution, 2021; Pattiruhu, 2022). This ratio can be used to calculate operating profit and operating costs. Studies by Nugroho & Rachmaniyah (2020) and Rachmawati (2009) found that BOPO has a significant effect on company value. However, it is not in line with what was done by Maryadi & Susilowati (2020), Utami et al. (2021), and Widianingsih et al. (2021).

This study was conducted to determine whether earnings moderate the influence of CAR, NPL, and BOPO on company value in conventional banks listed on the IDX for the 2020-2022 period. The hypotheses used in this study are:

1) H1: Capital Adequacy Ratio (CAR) has a significant effect on Company Value
2) H2: Non Performing Loan (NPL) has a significant effect on the value of the company
3) H3: Operating Expenses and Operating Income (BOPO) have a significant effect on Company Value
4) H4: Earning can strengthen between Capital Adequacy Ratio (CAR) and Company Value
5) H5: Earning can strengthen between Non-Performing Loan (NPL) and Company Value
6) H6: Earning can strengthen between Operating Expenses and Operating Income (BOPO) with Company Value

RESEARCH METHOD

The methodology is associative study with a causal relationship of some kind. Researchers looked at the relationship between company value as the dependent variable, earnings as the moderating variable, and the capital adequacy ratio, non-performing loan, and BOPO as independent variables. This study's data analysis approach makes use of both moderated regression analysis (MRA) tests and traditional assumption tests.

Conventional Commercial Banks Listed on the Indonesia Stock Exchange (IDX) for the 2020–2022 timeframe make up the study's population. Purposive sampling is a methodology for sampling. The study's sampling criteria are restricted to the following set of criteria:

Tabel 1. Research Sample

No	Criteria	Total
1	Companies that have been listed on the Indonesia Stock Exchange during the period 2020-2022	43
2	Banking companies not listed on IDX consecutively Year 2020-2022	(3)
3	Banking Companies That Earned Consecutive Profits in 2020-2022	(17)
	Total Research Sample	23
	Total sample x years of study period (23x3)	69

Source: IDX

Based on the data above, samples can be drawn by obtaining data from the IDX website and the website of each annual report for the 2020-2022 period. The number of banks is 43. Based on the sampling criteria above, as many as 69 (sixty-nine) samples that meet the criteria.

Tabel 2. Variable Operationalization and Measurement

Variable	Indicator	Measurement
CAR	Capital Adequacy Ratio	$CAR = \dfrac{Capital}{ATMR} \, x \, 100\%$
NPL	Non Performaing Loan	$NPL = \dfrac{Total\ non-performing\ loans}{Total\ Loans\ Disbursed} x\,100\%$
BOPO	Operating Expenses and Operating Income	$BOPO = \dfrac{Operating\ Expenses}{Operating\ Income} \, x \, 100\%$
Earning	ROA	$ROA = \dfrac{Net\ Profit}{Total\ Assets} \, x \, 100\%$

Company Value	PBV	$PBV = \dfrac{Stock\ Price}{Book\ Value\ of\ Shares}$

The research included documentation and literature reviews as data collection methods. Data are obtained for research using two methods: documentation and literature review. To obtain precise and pertinent information, the researcher gathers data from a variety of publications, books, journals, and references pertaining to the issue under investigation. For this investigation, secondary data were used in the documentation. The data gathering method employed is the process of capturing data groups from the websites of each company and the Indonesia Stock Exchange (IDX) in the form of yearly reports covering 2020–2022. Secondary data in the form of bank firm financial statements for the 2020–2022 period is the type of data used. This study's statistics are based on their proportionate nature.

$$Y = a + b1X1 + b2X2 + b3X3 + b4Z4 + b5X*Z + e$$

Information:
a : Constant value
Y : Critririon Variable (Company Value Variable)
X1 : Variabel Predictor (Variable Capital Adequacy Ratio)
X2 : Variabel Predictor (Variable Non-Perfoming Loans)
X3 : Variable Predictor (Variable Operating Expenses and Operating Income)
B : Regression Coefficient
Z : Variabel Moderator (Variable Earning)
X*Z : Predictor Variable*Moderator Variable
e : Standart Error

RESULTS AND DISCUSSION

Table 3. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
CAR	69	11.13	63.71	26.0700	10.68669
NPL	69	.00	7.99	2.6732	1.61349
BOPO	69	46.50	760.00	91.2412	83.09185
COMPANY VALUE	69	.00	16.58	1.2736	2.66669
ROA	69	.00	400.00	7.4826	47.97615
Valid N (listwise)	69				

Source: SPSS 23 Output Attachment

PBV (Enterprise Value) A company's value is an investor's perception of a company's value and is often linked to its share price. In this study, company value is a dependent variable and is measured using stock price/PBV. The results of the descriptive analysis of Company Value Statistics (PBV) show that the minimum value in conventional banking companies in Indonesia is 0.00 in 2020-2022.

Table 4. Multicollinearity Test

		Coefficientsᵃ	
		Collinearity Statistics	
	Model	*Tolerance*	*VIF*
1	CAR	.997	1.003
	NPL	.982	1.019

| BOPO | .997 | 1.003 |
| ROA | .982 | 1.019 |

a. Dependent Variable: COMPANY VALUE

Source: Processed Data

Table 5. Heteroscedasticity Test

Coefficientsᵃ

| Model | | Unstandardized Coefficients | | Standardized Coefficients | | |
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.580	1.063		2.428	.018
	CAR	-.010	.031	-.040	-.328	.744
	NPL	-.258	.204	-.156	-1.261	.212
	BOPO	-.004	.004	-.112	-.913	.365
	ROA	-.004	.007	-.068	-.547	.586

a. Dependent Variable: COMPANY VALUE

Source: Data Processed

Table 4: According to Ghozali (2016), the multicollinearity test determines if independent variables are related. There shouldn't be any correlation between the independent variables in a decent regression model. Independent variables are not orthogonal if they exhibit correlations with one another. The multicollinearity test's criterion is that the patient's value must be greater than 0.100 and their VIF must be less than 10.00 in order to rule out multicollinearity symptoms. The multicollinearity test findings indicate that either no multicollinearity symptoms exist or the multicollinearity hypothesis test is satisfied with a tolerance value of > 0.100 and a VIF of < 10.00.

Heteroscedasticity tests are made to determine whether the variance and residue of regression models are not the same between one observation and another. For this review, the Arch test can be used to determine the degree of heteroscedasticity. The Arch test regregates the actual value of the remaining independent variables (Ghozali, 2016). The decision-making criteria in testing in heteroscedasticity testing are as follows:

1. If the p-value ≥ 0.05 then H0 is accepted, which means that there is no heteroskedacity problems.

2. If the p-value ≤ 0.05 then H0 is rejected which means there is a problem heteroscedasticity.

The results of the Heteroscedasticity test show a significance value of the independent variable 0.018, so it concludes that the Heteroscedasticity Test has been fulfilled or no symptoms of Heteroscedasticity occur.

Table 6. Autocorrelation Test

Model Summaryᵇ

Model	R	R Square	Adjusted R Square	Std. Error Estimate
1	.275ᵃ	.076	.007	2.66214

a. Predictors: (Constant), LN_Z, LN_X1, LN_X2, LN_X3

b. Dependent Variable: LN_Y

Source: Data Processed

Table 7. Normality Test

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		69
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	1.83907011
Most Extreme Differences	Absolute	.100
	Positive	.088
	Negative	-.100
Test Statistic		.100
Asymp. Sig. (2-tailed)		.083[c]

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.

Source: Processed Data

Table 8. Moderated Regression Analysis (MRA) Test

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.835	1.152		3.330	.001
X1	.004	.035	.016	.116	.908
X2	.208	.256	.126	.814	.419
X3	-.034	.018	-1.059	-1.932	.058
X1N	-.007	.016	-3.313	-.456	.650
X2N	-.484	.173	-10.678	-2.799	.007
X3N	.014	.008	13.930	1.743	.086

a. Dependent Variable: Y

Source: Processed Data

Table 6 shows the Durbin-Watson value derived from the regression model estimation results in the autocorrelation test, which uses the Durbin-Watson test to ascertain whether there is autocorrelation in the regression model. One of the sources for using the Durbin-Watson (DW) test under the following circumstances to ascertain whether autocorrelation symptoms are present or absent:

1. Positive autocorrelation occurs, if the DW value is below -2 (DW < to +2.
2. No autocorrelation occurs, if the DW value is between -2 and +2 or -2 < DW < +2; and
3. Negative autocorrelation occurs, if the DW value is above +2 or DW >+2".

The results of the Autocorrelation test using the Durbin-Watson test showed that in this study there were no symptoms of autocorrelation because the value showed a number above σ = 5% or 0.05. So the conclusion 1.7343<2.66214<2.2657 does not occur Autocorrelation / normally distributed symptoms.

Table 7. Test normality using Kolmogorov Smirnov's statistical test. The Kolmogorov-Smirnov test is a test other than graphical analysis to test the normality of data. If the significance value > 0.05 from the Kolmogorov-Smirnov one-sample SPSS test, the researcher therefore uses normally distributed data to test the Kolmogorov-Smirnov test results. The results of the normality test using the Kolmogorov Smirnov test can be seen in Asymp. (2-

tailed) 0.083 then it can be concluded that the data is normally distributed because the significance value obtained is >0.05 which means there are no symptoms of normality.

Table 8: A test called moderate regression analysis (MRA) uses an independent variable called the moderator to determine how strongly or weakly other independent variables relate to the dependent variable (Ghozali, 2016). The present investigation included interaction tests (MRA), significant difference tests, and residual tests. The following are a few requirements for MRA model testing:

1. If calculate > table and the p-value < 0.05 then H1 is accepted and H0 is rejected. This means that the independent variable has a significant influence on the moderation variable.
2.   If calculate > table and the p-value > 0.05 then H1 is accepted and H0 is rejected. This means that the independent variable has a significant influence on the moderation variable**.**

The results of the Modereted Regression Analysis (MRA) test of the X2N variable with a significance value of 0.007 mean that Earning can strengthen between NPL and Company Value.

CONCLUSION

Capital Adequacy Ratio (CAR) does not have a significant effect on Company Value with a value of 0.908. Non Performing Loan (NPL) does not have a significant effect on Company Value with a value of 0.419. Operating expenses and operating profit (BOPO) do not have a significant effect with a value of 0.058. Earning does not strengthen between Capital Adequacy Ratio (CAR) and Company Value with a significance value of 0.650. Earning cannot strengthen between Non-Performing Loan (NPL) and Company Value with a value of 0.007. Earning can strengthen between Operating Expenses and Operating Income (BOPO) with Company Value. with a significance value of 0.086.

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