

# The Effect of Investing Policy Ratio, Net Profit Margin, Loan to Deposit Ratio and Return on Asset on Capital Adequacy Ratio in Banking Companies Listed in The Indonesia Stock Exchange

Fanny Dewi Lie Gunardy<sup>1</sup>, Melisa Cantika Dewi<sup>2</sup>, Siti Dini<sup>3</sup>, Anggono<sup>4</sup>

#### Abstract:

The aim of this research is to examine the influence of Investment Policy Ratio, Net Profit margin, loan to Deposit Ratio, Return on Assets and Capital Adequacy Ratio. In this research, researchers used quantitative research methods. The population used in the research was 53 banking companies and a sample of 29 banks with a total of 87 observations. The data analysis techniques used multiple linear regression analysis with SPSS version 26. The research results show that the Investing Policy Ratio and Net Profit Margin have no effect on the Capital Adequacy Ratio. Loan to Deposit Ratio has a positive and significant effect on the Capital Adequacy Ratio. Return on Assets has a negative and significant effect on the Capital Adequacy Ratio. Investing Policy Ratio, Net Profit Margin, Loan to Deposit Ratio and Return on Assets simultaneously have a positive and significant effect on the Capital Adequacy Ratio in banking companies listed on the Indonesia Stock Exchange. The determination size of 14.4% means that the Investing Policy Ratio, Net Profit Margin, Loan to Deposit Ratio and Return on Assets can explain the Capital Adequacy Ratio in banking companies listed on the Indonesia Stock Exchange.

*Keywords:* Investing Policy Ratio, Net Profit Margin, Loan to Deposit Ratio, Return on Asset, Capital Adequacy Ratio

# 1. Introduction

Banks are institutions that play an important role in the economy that function as *financial intermediaries* that collect funds from people who have excess funds with people who lack funds. The key to successful bank management is how the bank can convince the public so that its role as a financial intermediary can run well (Anwar & Murwaningsar 2017). The greater the bank capital owned by a bank will increase its capital adequacy ratio, otherwise if the company's capital is continuously eroded by losses experienced by the bank, the bank's capital adequacy ratio will decrease, this is because the losses experienced by the bank will absorb the capital owned by the bank (Iskandar 2020).

One of the indicators of bank health that must be considered is the capital adequacy or *Capital Adequacy Ratio*. *The* role of the *Capital Adequacy Ratio* (CAR) is to protect

<sup>&</sup>lt;sup>1</sup> Faculty of Economy, Universitas Prima Indonesia, Indonesia, <u>fannydewilie@gmail.com</u>

<sup>&</sup>lt;sup>2</sup> Faculty of Economy, Universitas Prima Indonesia, Indonesia, <u>melisacantikaa@gmail.com</u>

<sup>&</sup>lt;sup>3</sup> Faculty of Economy, Universitas Prima Indonesia, Indonesia, sitidini@unprimdn.ac.id

<sup>&</sup>lt;sup>4</sup> IBBI University, Indonesia, <u>anggono50@gmail.com</u>

customers and maintain the stability of the financial system as a whole in banking. The impact of the greater the value of the *Capital Adequacy Ratio* (CAR) results in a better banking capability in facing the possible risk of loss (Puspitasari et al., 2021). The higher the *Capital Adequacy Ratio* (CAR) reflects that it has a very good health level condition as a result of excellent business management (Noor & Rosyid 2018).

In achieving the targeted profit there is always a risk that must be faced, the higher the profit the greater the risk faced by the bank (Herizal et al., 2022). *Investing Policy Ratio* (IPR) is included as one of the financial ratios that have an important role in the *Capital Adequacy ratio* (CAR). This can be seen from the higher the deposit received by the bank, the higher the capital will also increase (Jha & Hui 2012).

*Net Profit Margin* (NPM) is also one of the financial ratios that is considered to affect the *Capital Adequacy Ratio* (CAR) (Torbira & Zaagha 2016). This ratio can be used to obtain information about the strengths and weaknesses of the company in the financial sector. If the *Net Profit Margin* (NPM) increases, it reflects the efficiency of the company in obtaining large profits so that capital will also increase (Adam 2014).

Loan to Deposit Ratio (LDR) is considered to affect the Capital Adequacy Ratio (CAR) because it is used to identify lending (Bateni et al., 2014). This ratio has an important role as an indicator that shows the level of credit expansion by the bank and can also be used to measure the functioning of the bank (Sari & Murni 2017). By channeling credit, the bank has the opportunity to benefit from the interest earned so that it is possible to increase capital (Vellanita et al., 2019).

In addition to the three ratios above, *Return on Asset* (ROA) is also an important factor in increasing the *Capital Adequacy Ratio* (CAR) (Sunaryo 2020; Alfiyanti & Hardiyanti 2020). Because assets are an important aspect of a company. The more effective a company is in using its assets, the higher the return on the use of these assets which can increase the company's expectations in obtaining large profits so that capital increases (Syifa 2018).

Some phenomena of *Investing Policy Ratio, Net Profit Margin, Loan to Deposti Ratio, Return on Asset* and *Capital Adequancy Ratio* in banking companies listed on the Indonesia Stock Exchange which can be seen in Table 1.1. are:

Table 1. Research Fhenomenon Data 2019-2021							
Emitmen	Year	Deposit	Net	Total	Assets	Capital	
			Profit	Credit			
BBTN	2019	206,905,692	209,263	232,212,539	1,369,167	21,037,417	
	2020	259,149,814	1,602,358	217,711,277	1,029,426	24,995,226	
	2021	273,189,056	2,376,227	247,285,433	1,539,577	31,598,482	
BJBR	2019	85,216,773	1,564,492	89,887,246	123,536,474	1,510,890	
	2020	102,397,654	1,519,996	87,450,934	140,961,431	1,845,800	
	2021	116,261,103	2,018,654	95,813,046	158,356,097	1,711,000	
BMAS	2019	10,340,649	59,747.00	5,466,907	7,569,580	6,068,955	
	2020	8,826,258	66,986.00	6,907,692	10,110,520	9,021,657	

Table 1. shows that the 2020 *Deposit* has decreased from 2019 in BMAS by 14.65% while the 2020 capital has increased from 2019 by 48.65%. *Net Profit in* 2020 decreased at BJBR from 2019 by 2.84% while capital in 2020 increased from 2019 by 22.17%. Total Credit in 2020 decreased in BJBR from 2019 by 2.71% while capital increased in 2020 from 2019 by 18.81%. *Assets in* 2020 decreased in BBTN from 2019 by 24.81% while capital in 2020 increased from 2019 by 18.81%. Meanwhile, the capital for BJBR in 2021 has decreased by 7.30%.

Despite the abundance of research on the factors influencing the Capital Adequacy Ratio (CAR) in banking companies, there appears to be a lack of comprehensive studies that simultaneously examine the effects of Investing Policy Ratio (IPR), Net Profit Margin (NPM), Loan to Deposit Ratio (LDR), and Return on Asset (ROA) on CAR specifically within the context of banking companies listed on the Indonesia Stock Exchange. While individual studies have explored these factors separately, there is a notable gap in the literature regarding the combined impact of these variables on CAR in the Indonesian banking sector.

This proposed research seeks to fill the aforementioned gap by conducting a comprehensive analysis that integrates multiple key determinants of CAR, namely IPR, NPM, LDR, and ROA, within the unique setting of banking companies listed on the Indonesia Stock Exchange. By simultaneously examining these factors, this study aims to provide a more holistic understanding of the dynamics influencing CAR in the Indonesian banking industry. Furthermore, by focusing on listed banking companies, this research contributes novel insights that are particularly relevant to investors, policymakers, and banking regulators operating within the Indonesian financial market.

The main objective of this study is to investigate the simultaneous effect of Investing Policy Ratio, Net Profit Margin, Loan to Deposit Ratio, and Return on Asset on the Capital Adequacy Ratio in banking companies listed on the Indonesia Stock Exchange. By analyzing these variables collectively, the study aims to provide insights into how various financial indicators contribute to the overall capital adequacy of banking institutions within the Indonesian market. This research ultimately seeks to offer valuable guidance for stakeholders, including investors, financial analysts, and regulatory authorities, in understanding and managing the capital adequacy of banks in Indonesia.

# 2. Theoretical Background

### Theory of the Effect of Investing Policy Ratio on Capital Adequacy Ratio

According to Dao (2020), an increase in the *Investing Policy Ratio* (IPR) means that there has been an increase in securities with a greater percentage than the percentage increase in third party funds, this can result in bank income will increase more than

costs so that bank profits increase, bank capital increases and the *Capital Adequacy Ratio* (CAR) of the bank increases.

*Investing Policy Ratio* (IPR) is used to measure how much bank funds are allocated in the form of investment in securities. Because investment in securities made by banks increases, income increases and profits increase and as a result capital increases so that the *Capital Adequacy Ratio* (CAR) increases (Madugu et al., 2020).

Banks that have a high *Investing Policy Ratio* (IPR) indicate that the value of securities owned by banks is greater than the increase in third party funds received by banks. The greater the *Investing Policy Ratio* (IPR) means that the company's liquidity will be better so that the banking *Capital Adequacy Ratio* (CAR) will increase (Kadim et al., 2020)).

Based on the theory above, the *Investing Policy Ratio* (IPR) indicates the ability of banks to process their securities to generate profits so that a high *Investing Policy Ratio* (*IPR*) value affects the *Capital Adequacy Ratio* (*CAR*).

#### Theory of the Effect of Net Profit Margin on Capital Adequacy Ratio

The greater the *Net Profit Margin* (NPM) ratio shows that the greater the bank's ability to generate net profit before tax. This shows that the bank's performance has also increased (Anggari et al., 2020).

According to Puspitasari et al. (2021), the greater the *Net Profit Margin*, the better the company is to generate profits compared to the sales achieved and investors will be more interested so that the share price will increase.

*Net Profit Margin* (NPM) reflects the company's ability to generate net profit from each of its sales, the higher the *Net Profit Margin* (NPM) value, the better it shows so that the impact on the *Capital Adequacy Ratio* (CAR) increases (Brastama & Yadna, 2020).

Based on the theory above that *Net Profit Margin (NPM)* provides information on the bank's ability to make a profit so that the higher the *Net Profit Margin (NPM)* value has a good impact on the banking *Capital Adequacy Ratio*.

#### Theory of the Effect of Loan to Deposit Ratio on Capital Adequacy Ratio

If the bank's *Loan to Deposit Ratio* channeled by the bank has exceeded the funds raised. The management of these public funds, banks are required to be able to maintain their liquidity in order to continue to gain the trust of the public. The size of a bank's LDR will affect the bank's *Capital Adequacy Ratio* (Suroso 2022).

Banks that have a high level of *Loan to Deposit Ratio* (LDR) indicate an increase in lending from third parties so that banks receive *loan* interest income which results in increased capital adequacy (Sunaryo, 2020).

The higher the *Loan to Deposit Ratio* shows the riskier the bank's liquidity conditions, on the other hand, the lower the *Loan to Deposit Ratio* shows the bank's lack of effectiveness in channeling credit (Abdurrohman et al., 2020).

Based on the theory above that the *Loan to Deposit Ratio* shows the ratio of the amount of credit to third party funds or deposits so that banks channel credit properly and get loan interest income which will increase capital and increase the *Capital Adequacy Ratio*.

#### Theory of the Effect of Return on Asset on Capital Adequacy Ratio

Any increase in the *Return On Asset* value will increase the *Capital Adequacy Ratio* value because the higher the bank's ability to generate profits, the more funds are earmarked to increase capital and the *Capital Adequacy Ratio* value will also increase (Dao, 2020).

According to Kurniawan (2021), *Return On Asset* or what is often referred to as economic profitability is a measure of the company's ability to generate profits with all the assets owned by the company. The greater this ratio, the better the company's ability to generate maximum profit by utilizing its assets. Conversely, if this ratio is low, it shows the company's low ability to generate profits which has an impact on the company itself.

The higher *return on assets* (ROA) of banking companies shows an increase in profits in these banking companies, the *capital adequacy ratio* (CAR) will increase because the capital owned by banking companies increases due to the profits earned by these companies (Madugu et al., 2020).

Based on the theory above that *Return on Asset* shows that the company uses its assets well so as to make a profit. So, the *Capital Adequacy ratio* will also increase along with increasing profits.

#### **Conceptual Framework**

Based on the theory above that the relationship between *Investing Policy Ratio, Net Profit Margin, Loan to Deposti Ratio* and *Return on Asset* affects the *Capital Adequancy Ratio* can be seen from the conceptual framework below.



Figure 1. Conceptual Framework

#### Hypothesis

Hypotheses in research are conjectures or answers that are temporary to the problems of a study whose truth needs to be tested using empirical data:

- H<sub>1</sub>: *Investing Policy Ratio* partially affects the *Capital Adequancy Ratio* in banking companies listed on the Indonesia Stock Exchange.
- H<sub>2</sub> : *Net Profit Margin* partially affects the *Capital Adequancy Ratio* in banking companies listed on the Indonesia Stock Exchange.
- H<sub>3</sub>: *Loan to Deposti Ratio* partially affects the *Capital Adequancy Ratio* in banking companies listed on the Indonesia Stock Exchange
- H<sub>4</sub> : *Return on Asset* partially affects the *Capital Adequancy Ratio* in banking companies listed on the Indonesia Stock Exchange.
- H<sub>5</sub> : Investing Policy Ratio, Net Profit Margin, Loan to Deposti Ratio and Return on Asset simultaneously affect the Capital Adequancy Ratio in banking companies listed on the Indonesia Stock Exchange.

# 3. Methodology

#### **Research Approach**

This study adopts a quantitative approach, focusing on data analysis for interpretation, as outlined by Mukhtazar (2020).

#### **Research Population and Sample**

The study targets banking companies listed on the Indonesia Stock Exchange between 2019-2021, totaling 53 companies. Purposive Sampling technique is employed based on specific criteria, resulting in a sample size of 29 banks, accounting for 87 observations.

#### **Data Collection Technique**

Data collection involves documentation, utilizing records such as books, journals, and financial reports, following the methods described by Aminoto and Agustina (2020).

#### **Data Types and Sources**

The study employs the literature and documentation methods to gather relevant information, utilizing secondary data from annual reports of banking companies listed on the Indonesia Stock Exchange between 2019-2021, accessed through www.idx.co.id.

### Data Analysis Technique:

The analysis involves several tests:

- 1. Classical Assumption Test:
  - Normality Test: Utilizing histogram graph and statistical tests.
  - Multicollinearity Test: Assessing Tolerance and VIF values.
  - Autocorrelation Test: Employing the Run Test.
  - Heteroscedasticity Test: Utilizing scatterplot analysis and the Glejser Test.
- 2. Research Data Analysis Model:

- Multiple linear regression analysis is conducted to determine the significant partial or simultaneous influence of independent variables on the dependent variable (Capital Adequacy Ratio).

3. Coefficient of Determination: Measures the model's ability to explain variations in the dependent variable.

4. Simultaneous Hypothesis Testing (F Test): Determines the collective significance of independent variables on the dependent variable.

5. Partial Hypothesis Testing (t test): Assesses the individual significance of independent variables on the dependent variable.

### 4. Empirical Findings/Result

#### **Descriptive Statistics**

The results of the descriptive analysis of the variables in the study are presented in table 3.1 below:

Table 4. Descriptive Statistics								
Descriptive Statistics								
N Minimum Maximum Mean Std. Deviation								
IPR	87	.001	12.506	.56124	1.563688			
NPM	87	.02	18.40	2.2233	3.18559			
LDR	87	13.30	229.23	84.8682	34.01473			
ROA	87	.02	24.48	2.5506	4.21420			
CAR	87	13.69	78.90	27.7468	13.07083			
Valid N (listwise)	87							

Source: SPSS Processing Data (2023)

Based on Table 4 it is known that :

- 1. *The Investing Policy Ratio* in banking companies listed on the Indonesia Stock Exchange has a minimum value of 0.001% obtained by PNBN in 2019 and BNBA in 2021 and a maximum value of 12.506% obtained by SDRA in 2021. The average value obtained for the *Investing Policy Ratio* is 0.56124 while the standard deviation value is 1.563688.
- 2. *The Net Profit Margin* variable has a minimum value of 0.02% obtained by BTPS in 2020 and a maximum value of 18.40% obtained by PNBN in 2019. The average value obtained for *Net Profit Margin is* 2.2233 while the standard deviation value is 3.18559.
- 3. *The Loan to Deposit Ratio* variable has a minimum value of 13.30% obtained by PNBN in 2021 and a maximum value of 229.23% obtained by the NISP company in 2021. The average value obtained for the *Loan to Deposit Ratio* is 84.8682 while the standard deviation value is 34.01473.
- 4. *The Return on Asset* variable has a minimum value of 0.02% obtained by the AMAR company in 2021 and a maximum value of 24.48% obtained by SDRA in 2021. The average value obtained for *Return on Asset* is 2.5506 while the standard deviation value is 4.21420.

5. *The Capital Adequacy Ratio* variable has a minimum value of 13.69% obtained by BMAS in 2021 and a maximum value of 78.90% obtained by PNBN in 2020. The average value obtained for the *Capital Adequacy Ratio* is 27.7468 while the standard deviation value is 13.07083.

#### Normality Test

The normality test examines if the sample data follows a normal distribution. Figures 2 and 3 display a histogram and a normal probability plot, respectively. Both indicate a normal distribution pattern, corroborated by Table 5, where the significance value (0.200) suggests normal data distribution.

#### **Multicollinearity Test**

The results indicating no multicollinearity between independent variables, as tolerance values (> 0.1) and VIF values (< 10) meet criteria.

#### **Autocorrelation Test**

The autocorrelation test yields a significance value (0.332) above 0.05, suggesting no autocorrelation in the data.

#### **Heteroscedasticity Test**

The result displays a scatterplot indicating no clear pattern, suggesting no heteroscedasticity. Table 8 further confirms this, with all independent variables showing p-values (> 0.05) indicating no heteroscedasticity.

### **Multiple Linear Regression Analysis**

Multiple linear regression analysis is an analysis to determine whether there is a significant partial or simultaneous influence between two or more independent variables on one dependent variable.

	Table 9: Multiple Ellicar Regression Analysis							
			Coefficie	nts <sup>a</sup>				
		Unstandar	dized Coefficien	Standardized ts Coefficients				
Model		В	Std. Error	Beta	t	Sig.		
1	(Constant)	.036	.005		7.583	.000		
	IPR	.001	.001	.115	.818	.415		
	NPM	001	.001	176	-1.546	.126		
	LDR	.000	.000	.273	2.305	.024		
	ROA	001	.000	323	-2.243	.028		
a. Depe	endent Varial	ole: CAR in	verse					

### **Table 9. Multiple Linear Regression Analysis**

Source: SPSS Processing Data (2023)

Based on the analysis results in table 9, the regression equation used in this study is as follows:

CAR = 0.036 + 0.001 IPR + (-0.001) NPM + 0.000 LDR + (-0.001) ROAThe regression equation can be interpreted that :

- 1. The alpha coefficient value of 0.036 means that statistically when all independent variables, namely *Investing Policy Ratio*, *Net Profit Margin*, *Loan to Deposti Ratio* and *Return on Asset*, are constant, the value of the *Capital Adequancy Ratio* variable is 0.036.
- 2. *The Investing Policy Ratio* variable has a regression coefficient of 0.001 which indicates that there is a positive effect of the *Investing Policy Ratio* on the *Capital Adequancy Ratio of* 0.001 which means that if the *Investing Policy Ratio* increases by 1 unit, the *Capital Adequancy Ratio* will increase by 0.001 assuming that the other independent variables are constant.
- 3. *The Net Profit Margin* variable has a regression coefficient of 0.001 which indicates that there is a negative effect of *Net Profit Margin* on the *Capital Adequancy Ratio* of 0.001 which means that if *Net Profit Margin* decreases by 1 unit, the *Capital Adequancy Ratio* will increase by 0.001 assuming that the other independent variables are constant.
- 4. *The Loan to Deposti Ratio* variable has a regression coefficient of 0.000 which indicates that there is a positive effect of the *Loan to Deposti Ratio* on the *Capital Adequancy Ratio of* 0.000, which means that if the *Loan to Deposti Ratio* increases by 1 unit, the *Capital Adequancy Ratio* will increase by 0.000 assuming that the other independent variables are constant.
- 5. *The Return on Asset* variable has a regression coefficient of 0.001 which indicates that there is a negative effect of *Return on Asset on* the *Capital Adequancy Ratio* of 0.001 which means that if *Return on Asset* decreases by 1 unit, the *Capital Adequancy Ratio* will increase by 0.001 assuming that the other independent variables are constant.

#### **Coefficient of Determination**

The coefficient of determination is essentially to measure how far the model's ability to explain the variation in the dependent variable. The coefficient of determination is between zero and one. The higher the coefficient of determination, the better the ability of the independent variables to explain the behavior of the dependent variable.

	Table 10. Determination Coefficient Test									
Model Summary <sup>b</sup>										
Model	R	R Square	Adjusted R Square	Std. Error Estimate	of	the				
1	.428 <sup>a</sup>	.184	.144	.01302						
a. Predic	tors: (Consta	nt), ROA, NPM, L	DR, IPR							
b. Depen	dent Variable	e: CAR_inverse								

Source: SPSS Processing Data (2023)

From the table 10 above that *Adjusted R Square* is 0.144, it means that *Investing Policy Ratio, Net Profit Margin, Loan to Deposti Ratio* and *Return on Asset* can explain the *Capital Adequancy Ratio* in banking companies listed on the Indonesia Stock Exchange by 14.4% and the remaining 85.6% (100-14.4) is influenced by other variables outside of this study such as: *Financing to Deposit Ratio*, Operating Expenses and Operating Income (BOPO, and so on.

#### F test

The F test is used to determine whether simultaneously the independent variable has a significant effect or not on the dependent variable. The following are the results of simultaneous testing, namely:

	Table 11. F-test							
ANOVA <sup>a</sup>								
		Sum	of					
Model		Squares	df	Mean Squar	e F	Sig.		
1	Regression	.003	4	.001	4.610	.002 <sup>b</sup>		
	Residuals	.014	82	.000				
	Total	.017	86					
a. Dep	endent Varia	ble: CAR_ir	nverse					
b. Pred	lictors: (Cons	stant), ROA	, NPM, LD	R, IPR				

Source: SPSS Processing Data (2023)

From the results above, it shows that the *Investing Policy Ratio*, *Net Profit Margin*, *Loan to Deposti Ratio* and *Return on Asset* simultaneously have a positive and significant effect on the *Capital Adequancy Ratio* in banking companies listed on the Indonesia Stock Exchange due to the value of F count (4.610) > F table (2.48) and the significant value obtained is 0.002 < 0.05.

### Test t

The t test is used to see whether the independent variable affects the dependent variable itself. The t-test results are as follows, based on the results of the SPSS program:

			Table 12. Th	e t-test		
			Coefficie	nts <sup>a</sup>		
				Standardized		
		Unstandar	rdized Coefficien	ts Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	.036	.005		7.583	.000
	IPR	.001	.001	.115	.818	.415
	NPM	001	.001	176	-1.546	.126
	LDR	.000	.000	.273	2.305	.024
	ROA	001	.000	323	-2.243	.028
a Dam	and ant Varia	hlar CAD :	<b>NU0</b>			

a. Dependent Variable: CAR\_inverse

Source: SPSS Processing Data (2023)

The results above show that :

- Investing Policy Ratio has no effect on Capital Adequancy Ratio in banking companies listed on the Indonesia Stock Exchange due to the value of t count (0.818) < t table (1.989) and a significant value of 0.415 > 0.05.
- 2. *Net Profit Margin* has no effect on *Capital Adequancy Ratio* in banking companies listed on the Indonesia Stock Exchange due to the value of t count (-1.546) > t table (-1.989) and the significant value obtained is 0.126> 0.05.

- 3. Loan to Deposti Ratio has a positive and significant effect on Capital Adequancy Ratio in banking companies listed on the Indonesia Stock Exchange due to the t
- value (2.305) > t table (1.989) and a significant value of 0.024 <0.05.</li>
  4. *Return on Asset has a* negative and significant effect on *Capital Adequancy Ratio*
- in banking companies listed on the Indonesia Stock Exchange due to the t value (-2.243) < t table (-1.989) and a significant value of 0.028 < 0.05.

# 5. Discussion

#### Effect of Investing Policy Ratio on Capital Adequacy Ratio

Partial test results obtained *Investing Policy Ratio* has no effect on *Capital Adequancy Ratio* in banking companies listed on the Indonesia Stock Exchange. These results are in line with Wulandari's research (2019) which obtained the same results, namely the *Investing Policy Ratio has* no effect on the *Capital Adequancy Ratio*. Banks with a low *Investing Policy Ratio are* still able to meet the *Capital Adequacy Ratio* despite the lack of ability of securities owned when customers withdraw their funds from the company. Due to the *profit* earned by the company, it is able to cover the shortfall without disturbing the adequacy of banking capital. However, a high level of profitability has no impact on the ability of banks to maintain the *Capital Adequacy Ratio is* low, the banking *Capital Adequacy Ratio* will definitely be disrupted when the demand for withdrawal of funds by customers is high. So that Profitability is unable to moderate the relationship between *Investing Policy Ratio* and *Capital Adequacy Ratio*.

#### Effect of Net Profit Margin on Capital Adequacy Ratio

Partial test results obtained *Net Profit Margin* has no effect on *Capital Adequancy Ratio* in banking companies listed on the Indonesia Stock Exchange. The greater the *Net Profit Margin* (NPM) ratio shows that the greater the bank's ability to generate net profit before tax. This shows that the bank's performance has also increased (Anita, et al, 2020). According to Sutrisno (2020), the greater the *Net Profit Margin*, the better the company is to generate profits compared to the sales achieved and investors will be more interested so that the stock price will increase. These results are not in line with existing theory because *Net Profit Margin* (NPM) reflects the company's ability to generate net profit from each of its sales, the higher the *Net Profit Margin* (NPM) value, the capital coverage to accommodate the risk of losses that may be faced by banks increases so that it affects the *Capital Adequancy Ratio* (CAR) of banks.

#### Effect of Loan to Deposit Ratio on Capital Adequacy Ratio

Partial test results obtained *Loan to Deposit Ratio has a* positive and significant effect on *Capital Adequancy Ratio* in banking companies listed on the Indonesia Stock Exchange. These results are in line with Martanorika's research (2018) which obtained the same results, namely the *Loan to Deposit Ratio has a* positive effect on the *Capital Adequancy Ratio*. Banks that have a high level of *Loan to Deposit Ratio* (LDR) indicate an increase in lending from third parties so that banks receive loan interest income which results in increased capital adequacy. The results of previous research state that *Loan to Deposit* (LDR) has a positive effect on the *Capital Adequacy Ratio*.

#### Effect of Return on Asset Ratio on Capital Adequacy Ratio

Partial test results obtained *Return on Asset has a* negative and significant effect on *Capital Adequancy Ratio* in banking companies listed on the Indonesia Stock Exchange. These results are in line with Nuraini's research (2020) which obtained the same results, namely *Return on Asset has a* negative effect on the *Capital Adequancy Ratio*. Based on the research conducted, it shows that ROA has a negative and significant effect on CAR. This shows that if ROA increases, CAR will decrease. Thus, the results of this study are anomalous, because they are not in line with the theory put forward earlier which states that the ROA ratio has a positive relationship to the increase in CAR. Banks that have high profits cannot be utilized effectively so that their capital cannot increase

#### 5. Conclusions

Based on the findings of the research, it can be concluded that Investing Policy Ratio and Net Profit Margin do not have a significant impact on the Capital Adequacy Ratio (CAR) of banking companies listed on the Indonesia Stock Exchange. However, the Loan to Deposit Ratio (LDR) shows a positive and significant effect on CAR, suggesting that higher LDR values contribute to a healthier CAR. Conversely, Return on Asset (ROA) demonstrates a negative and significant impact on CAR. Moreover, when considering all variables together, including Investing Policy Ratio, Net Profit Margin, Loan to Deposit Ratio, and Return on Asset, there is a collective positive and significant effect on CAR.

From these conclusions, several recommendations emerge. Firstly, for investors, it is advisable to focus on companies with high Loan to Deposit Ratio values and robust Capital Adequacy Ratio figures, as a higher LDR indicates better third-party fund management. Secondly, companies themselves should aim to maintain elevated levels of Loan to Deposit Ratio to ensure optimal financial liquidity and subsequently bolster their Capital Adequacy Ratio. Lastly, for future researchers, it is recommended to extend the research period to uncover more influential insights. Additionally, incorporating variables such as Financing to Deposit Ratio (FDR) could provide a more comprehensive understanding of the factors impacting CAR. By expanding the scope and duration of research, future studies may yield more nuanced findings and contribute further to the understanding of banking dynamics on the Indonesia Stock Exchange.

### **References:**

- Abdurrohman, A., Fitrianingsih, D., Salam, A. F., & Putri, Y. (2020). Pengaruh Capital Adequacy Ratio (CAR), Loan To Deposit Ratio (LDR) Dan Non Performing Loan (NPL) Terhadap Return On Asset (ROA) Pada Sektor Perbankan Di Bursa Efek Indonesia. Jurnal Revenue: Jurnal Ilmiah Akuntansi, 1(1), 125-132.
- Adam, M. H. M. (2014). Evaluating the Financial Performance of Banks using financial ratios-A case study of Erbil Bank for Investment and Finance. *European Journal of Accounting Auditing and Finance Research*, 2(6), 162-177.
- Afiyanti, A., & Hardiyanti, W. (2020). Impact Analysis Of Capital Adequacy Ratio (Car) And Return On Asset (Roa) On Financing Of Murabaha On Sharia Bank In Indonesia Period Year 2014-2018. Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi, 8(3).
- Anwar, Y., & Murwaningsar, E. (2017). The effect of credit risk and capital adequacy ratio upon return on asset (a case study at banking listed in Indonesia Stock Exchange). *The Accounting Journal of Binaniaga*, *2*(02).
- Anggari, N. L. S., & Dana, I. M. (2020). The effect of capital adequacy ratio, third party funds, loan to deposit ratio, bank size on profitability in banking companies on IDX. *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 4(12), 334-338.
- Bateni, L., Vakilifard, H., & Asghari, F. (2014). The influential factors on capital adequacy ratio in Iranian banks. *International Journal of Economics and Finance*, 6(11), 108-116.
- Brastama, R. F., & Yadnya, I. P. (2020). The effect of capital adequacy ratio and non performing loan on banking stock prices with profitability as intervening variable. *American Journal of Humanities and Social Sciences Research* (AJHSSR), 4(12), 43-49.
- Dao, B. (2020). Bank capital adequacy ratio and bank performance in Vietnam: A simultaneous equations framework. *Journal of Asian Finance, Economics and Business*, 7(6), 039-046.
- Herizal, M., Diana, D., Rezti, R., & Suryani, S. (2022). The Effect of Capital Adequacy Ratio, Loan to Deposit Ratio, and Operational Costs than Operating Revenue on Return on Assets: Study on Conventional Banks in Indonesia. *Hut Publication Business and Management*, 1(2), 42-59.
- Iskandar, Y. (2020). the Influence of Capital Adequacy Ratio, Loan-To-Deposit Ratio, and Net Interest Margin on Stock Return At Commercial Banks in Indonesia. *Jurnal Aplikasi Manajemen*, 18(3), 533-538.
- Jha, S., & Hui, X. (2012). A comparison of financial performance of commercial banks: A case study of Nepal. *African Journal of Business Management*, 6(25), 7601.
- Kadim, A., Sunardi, N., & Husain, T. (2020). The modeling firm's value based on financial ratios, intellectual capital and dividend policy. *Accounting*, 6(5), 859-870.

- Kurniawan, A. (2021). Analysis of the effect of return on asset, debt to equity ratio, and total asset turnover on share return. *Journal of Industrial Engineering & Management Research*, 2(1), 64-72.
- Madugu, A. H., Ibrahim, M., & Amoah, J. O. (2020). Differential effects of credit risk and capital adequacy ratio on profitability of the domestic banking sector in Ghana. *Transnational Corporations Review*, *12*(1), 37-52.
- Noor, M. I., & Rosyid, P. I. (2018). Effect of capital adequacy ratio (CAR), loan to deposit ratio (LDR) and return on equity (ROE) on share price PT Bank Danamon Indonesia, TBK. *International Journal of Business and Applied Social Science (IJBASS) Vol*, 4.
- Puspitasari, E., Sudiyatno, B., Hartoto, W. E., & WIDATI, L. W. (2021). Net interest margin and return on assets: A Case Study in Indonesia. *The Journal of Asian Finance, Economics and Business*, 8(4), 727-734.
- Sari, Y. A. N., & Murni, N. S. I. M. (2017). Analysis of the effect of third party fund, capital adequacy ratio, and loan to deposit ratio on bank" s profitability after the application of IFRS. *The Indonesian Accounting Review*, 6(1), 81-90.
- Sunaryo, D. (2020). The effect of capital adequacy ratio (CAR), net interest margin (NIM), non-performing loan (NPL), and loan to deposit ratio (LDR) against return on Asset (ROA) in general banks in Southeast Asia 2012-2018. *Ilomata International Journal of Management*, *1*(4), 149-158.
- Suroso, S. (2022). Analysis of the Effect of Capital Adequacy Ratio (CAR) and Loan to Deposit Ratio (LDR) on the Profits of Go Public Banks in the Indonesia Stock Exchange (IDX) Period 2016–2021. Economit Journal: Scientific Journal of Accountancy, Management and Finance, 2(1), 45-53.
- Syifa, A. (2018). The Impact Of Non Performing Finance (NPF), Capital Adequacy Ratio (CAR), And Financing Deposit Ratio (FDR) To Return On Asset (ROA) With Depositor Funds As A Moderating Variable In Islamic Banks. *Jurnal Akuntansi Berkelanjutan Indonesia*, 1(2), 168.
- Torbira, L., & Zaagha, A. S. (2016). Capital adequacy measures and bank financial performance in Nigeria: A cointegration analysis. *Journal of Finance and Economic Research*, 3(1), 15-34.
- Vellanita, A., Arimbawa, I. G., & Damayanti, E. (2019, November). Relationship Between Non Performing Loans (Npl), Capital Adequacy Ratio (Car), Loan To Deposit Ratio (Ldr) Towards Return on Equity (Roe) At Pt. Bank Central Asia 2014–2018. In *Journal of world conference (JWC)* (Vol. 1, No. 2, pp. 211-216).