



EFFECT OF CAPITAL ADEQUACY RATIO, NON PERFORMING LOANS, CURRENT RATIO, FINANCING TO DEPOSIT RATIO TO RETURN ON ASSETS IN THE **BANKING SECTOR** 

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### Abstract

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**Publish**: 31/12/2023 This research a \_ For know Influence Capital Adequacy Ratio, Non Performing Loans, Current Ratio, Financing to Deposit Ratio Against Return On Assets In the Banking Sector Registered at Indonesia stock exchange 2016-2021. Data Which used sourced from data annual .Which has done election based on criteria which are already determined. Population used on company This is whole The Banking Company amount 1 0 company, with using a purposive sample of k 60 samples. On source : https://www.idnfinancials.com/id/company/industry/bank-57 . This research is desired in order to become a knowledge knowledge Which can help para researcher furthermore And Also can help para student or public general Which need something information from study This. From study it can be seen that the Capital Adequacy Ratio (CAR), Current Ratio (CR) and Financing to Deposit Ratio (FDR) partially negative and insignificant effect on Return On Assets (ROA) in Banking Companies while Non Performing Loans (NPL) partially have a negative and significant effect on Return On Assets (ROA) in banking companies.

Keywords: Capital Adequacy Ratio (CAR), Non performing loans (NPLs), Current Ratio (CR), financing to Deposits Ratio (FDR), return On Assets (ROA)

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### **INTRODUCTION**

Sector Banking is the backbone for Indonesian economy and own role very important as financial intermediary. Health bank own important influence on the health of the economy in general (Kasmir 24:2014). Level health bank can seen through several indicators or tools measuring. One of tool measure that is with use a number of ratio finance. The profitability ratio is one measure in viewing financial performance banking, in study This ratio profitability the is return On Assets (ROAs). According to Mamduh (2016: 155), Return On Assets (ROA) is a tool for measuring the company's ability to generate profits using total assets. Some factors Which influence performance finance bank Which used in study This that is Capital Adequacy (CAR), Non Performing Loans (NPL), Current Ratio (CR), and Financing to Deposits Ratio (FDR). Capital Adequacy Ratio (CAR) is a capital adequacy ratio that serves to accommodate the risk of loss that may be faced by a bank. The higher the CAR, the better the bank's ability to bear the risk of risky credit/productive assets anv According to Mainata (2017), Capital Adequacy Ratio (CAR) is ratio obligation in meeting the minimum capital. Capital Adequacy Ratio (CAR) has an effect on return On Assets (ROA), that the more big Capital Adequacy Ratio (CAR) so bank profitability will be greater. Indicators are also concerned to measure health bank is with analysis aspect assets covers Non performing loans (NPLs).

Non-Performing Loan (NPL) credit with quality substandard, doubtful, loss refers to a condition where the debtor is unable to pay obligations to the bank. In Bioshop Research (2018),states Non that Performing Loans (NPL) is one of the measurements of the bank's business risk ratio that shows the magnitude risk of nonperforming loans in a bank. Non Performing Loan (NPL) influence on Return On Assets (ROA) that the greater the value of Non Performing Loans (NPL) then the value of Return On Assets (ROA) smaller and vice versa. Besides that Current Ratio (CR) Also used For measure health bank.

According to Kasmir (2018: 134), Current Ratio (CR) is a ratio for measuring the company's ability to pay short-term obligations. Current Ratio (CR) influential to return On Assets (ROA), that If Current Ratio (CR) low means indicates a problem in the liquidity of a company and affects the value Return On Assets (ROA) which the smaller and vice versa if the Current Ratio (CR) is too tall too \_ No Good, Because show many fund Which unemployed And finally can reduce the company's profit ability in calculate in the Return On Assets ratio (ROA) . Apart from the Current Ratio (CR), the Financing to Deposit Ratio (FDR) also plays an important role For measure banking health.According to research Lestari (2021), Financing to Deposit Ratio (FDR) is ratio Which used measure amount fund Which channeled after compared to the amount of public savings funds (savings). Financing to Deposits Ratio (FDR) influential to return On Assets (ROA), that If Financing to Deposits Ratio (FDR) increase so return On Assets (ROA) Also increase.

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### **RESEARCH METHODS**

Study use method which form descriptive and quantitative on purposive sampling For researching sample from population . Purposive sampling is a technique determination of the sample with certain considerations. The reason for using this purposive sampling technique is because it is suitable for use in quantitative research, or studies that do not generalize according to Sugiyono, (2016: 85).

According to Sugiyono (2018: 80). population is an area of generalization consists of objects/subjects that have specified qualities certain and characteristics by researchers to be studied and then drawn conclusions. Population used in this study are the financial statements of banking companies listed on the Stock Exchange Effect Indonesia period 2016-2021 years totaling 47 companies.

Sample study is part Which give description in a manner general from population. According to Sugiyono (2018: 118), the sample is part of the number and characteristics belonging that to population. While the sample size is a step For determine magnitude sample Which taken in carry out something study. In this study researchers used a purposive technique sampling . purposive sampling according to Sugiyono (2018: 138).

According to Dorothy (2017:91), Test Normality \_ is test distribution Which will analyzed, whether the distribution is normal or not, so that it can be used in the analysis parametric. If the data is not normally distributed, then we cannot use parametric analysis instead using nonparametric analysis. However, there is another solution If data No distributed normal, that is with add more Lots amount sample.

### **RESULTS AND DISCUSSION**

In this study using multiple linear regression analysis. Regression analysis linear multiples have more independent variables of one. The formula for linear regression analysis double is :

 $Y = a + \beta 1x1 + \beta 2x2 + \beta 3x3 + \beta 4x4 + e$ 

Information:

e

Y	: Return On Assets (ROA)				
А	: constant				
X1	: Capital Adequacy Ratio (CAR)				
X2	: Non performing loans (NPL)				
X3	: Current Ratio (CR)				
X4	: Financing to Deposit Ratio (FDR)				
$\beta 1, \beta 2, \beta 3, \beta 4$ : Regre	$\beta$ 1, $\beta$ 2, $\beta$ 3, $\beta$ 4 : Regression coefficient				

: Standard error (level error 5%)

all research sample data in Banking Sector Companies on the Indonesian Stock Exchange for 2016-2021, as can be observed in table bellow:

Descriptive Statistics

	Ν	Mean	Std. Deviation
Ln_CAR	60	3.1446	.45621
Ln_NPL	60	1.0199	1.67903
Ln_CR	60	4.7612	.30515
Ln_FDR	60	2.8726	1.41239
Ln_ROA	60	4.0976	2.63917
Valid N (listwise)	60		

#### Table 1. Statstic

1. Of the 60 data samples studied during the 2016-2017 period, the average value (mean) Return On Assets namely 4.0976 and the value of Std. Deviation is 2.63917.

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2. Of the 60 data samples studied during the 2016-2017 period, the average value (mean) The Capital Adequacy Ratio is 3.1446 and the value of Td. Deviation is 0.45621.

3. Of the 60 data samples studied during the 2016-2017 period, the average value (mean) Non Performing Loan namely 1.0199 and Sdt. Deviation is 1.67903.

4. Of the 60 data samples studied during the 2016-2017 period, the average value (mean) The Current Ratio is 4.7612 and Sdt. Deviation is 0.30515.

5. Of the 60 data samples studied during the 2016-2017 period, the average value (mean) The Financing to Deposit Ratio is 2.8726 and Tdt. Deviation is 1.41239.

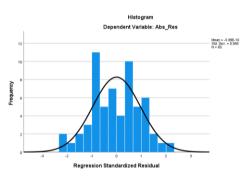


Figure 1. Graph Analysis of Normality Test

Figure Graph The histogram of the data shows that the data pattern is distributed normal because most are in in a curve that forms symmetrically, it can be concluded with the applicable provisions.

#### One-Sample Kolmogorov-Smirnov Test

			Abs_Res
N			60
Normal Parameters <sup>a,b</sup>	Mean		2.1218
	Std. Deviation		1.23458
Most Extreme Differences	Absolute		.109
	Positive	.109	
	Negative	082	
Test Statistic			.109
Asymp. Sig. (2-tailed) <sup>c</sup>			.072
Monte Carlo Sig. (2-	Sig.		.069
tailed) <sup>d</sup>	99% Confidence Interval	Lower Bound	.062
		Upper Bound	.075

a. Test distribution is Normal.
b. Calculated from data.

c. Lilliefors Significance Correction

. Lilliefors Significance (

d. Lilliefors' method based on 10000 Monte Carlo samples with starting seed 2000000.

# Figure 2. Output SPSS Which processed by the author, 2023

From the results of the data processing shown in the table above, the normality result is 0.072. Then it can be concluded Asymp. Sig. (2-tailed) worth 0.072> 0.05, it is stated that the information has a normal distribution. So it can be concluded that the regression meets the assumption of normality.

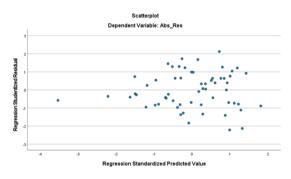


Figure 3. Scatterplot Graph

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Exposure picture the show that dot, dot, dot data spread too not gathered, so Can concluded that there is no heteroscedasticity.

	Coefficients <sup>a</sup>					
	Unstand	lardized	Standardized			
	Coeffi	cients	Coefficients			
		std.				
Model	В	Error	Betas	t	Sig.	
1 (Constant)	-1,744	2,506		696	.489	
Ln_CAR	274	.346	101		.432	
				792		
Ln_NPL	.196	096	.267	2046	046	
Ln_CR	.808	.510	.200	1,585	.119	
Ln_FDR	.237	.114	.271	2082	042	

a. Dependent Variable: Abs\_Res

### Table 2. Glejser test

From table above it can be seen that the significant value of Capital Adequacy Ratio (CAR) is 0.432 > 0.05, Non Performing Loans (NPL) 0.046 > 0.05, Current Ratio (CR) 0.119 > 0.05, Financing to Deposit Ratio (FDR) ) 0.042 < 0.05, which means that this study has no heteroscedasticity problem in the regression model.

		Coefficients <sup>a</sup>				
				Standardize		
		Unstan	dardize	d		
		d Coef	ficients	Coefficients		
			std.			
Μ	odel	В	Error	Betas	t	Sig.
1	(Constant	-1,744	2,506		696	.48
	)					9
	Ln_CAR	274	.346	101		.43
					792	2
	Ln_NPL	.196	096	.267	2046	046

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Ln_CR	.808	.510	.200	1,58	.11	
				5	9	
Ln_FDR	.237	.114	.271	2082	042	

a. Dependent Variable: Abs Res

# Table 3. Multiple Linear RegressionEstimation

From the results of the SPSS output in the table above, the multiple regression equation is obtained as follows:

Y = 7.060 + 0.926 + 0.387 + (-1.191) + 0.209
Y = 7.060
X 1 = 0.926
X 2 = 0.387
X 3 = -1.191
X 4 = 0.209
1. Based on the table in on the co- efficient

1. Based on the table in on the co- efficient value of -0.27 4 that the variable Capital Adequacy Ratio (CAR) to Return On Assets (ROA) is -0.274, if the variable increases by 1 unit assuming the other independent variables are constant, then there is an increase in Return On Assets (ROA) of -0.274.

2. Based on the table in on the coefficient value of 0.196 that the Non Performing Loan (NPL) variable on Return On Assets (ROA) is 0.196, if the variable increases by 1 unit assuming the other independent variables are constant, then there is an increase in Return On Assets (ROA) of 0.196.

3. Based on the table in on the coefficient value of 0.808 that the variable Current Ratio (CR) to Return On Assets (ROA) is 0.808, if the variable increases by 1 unit assuming the other independent variables



are constant, then there is a decrease in Return On Assets (ROA) of 0.808.

4. Based on the table in on the coefficient value of 0.237 that the variable Financing to Deposit Ratio (FDR) to Return On Assets (ROA) is 0.237, if the variable increases by 1 unit assuming the other independent variables are constant, then there is an increase in Return On Assets (ROA) of 0.237.

	Coefficients <sup>a</sup>				
	Unstand	lardized	Standardized		
	Coeffi	cients	Coefficients		
		std.			
Model	В	Error	Betas	t	Sig.
1 (Constant)	-1,744	2,506		696	.489
Ln_CAR	274	.346	101		.432
				792	
Ln_NPL	.196	096	.267	2046	046
Ln_CR	.808	.510	.200	1,585	.119
Ln_FDR	.237	.114	.271	2082	042

a. Dependent Variable: Abs\_Res

Table 4. Partial Test (T Test)

1. From the results of the table above it states that the variable l Capital Adequacy Ratio (CAR) has a t value of -0.7 92 < 1.67252 with a significant level of 0.432 > 0.05 H 0 is accepted H a is rejected , this shows that the Capital Adequacy Ratio (CAR) has a negative and not significant effect on Return On Assets (ROA) in the Banking sector listed on the Indonesia Stock Exchange for the 2016-2021 period.

2 . From the results of the table above it states that the variable Non Performing Loan (NPL) has a t count of 2.046 <1.67252 with a significant level of 0.046 <0.05 H 0 is accepted H a is rejected , this shows that Non Performing Loan (NPL)

has an effect positive and significant towards Return On Assets (ROA) in the Banking sector listed on the Indonesia Stock Exchange for the 2016-2021 period

3. The results of the table above state that the Current Ratio (CR) variable has a tcount value of 1.585 < 1.67252 with a significant level of 0.289 > 0.05 H 0 is accepted H a is rejected, this shows that The Current Ratio (CR) has a positive and insignificant effect on Return On Assets (ROA) in the banking sector listed on the Indonesia Stock Exchange for the 2016-2021 period.

4. The results of the table above state that the Financing to Deposit Ratio (FDR) variable has a t- count value of 2.082 > 1.67252 with a significant level of 0.042 <0.05 H 0 is accepted H a is rejected , this shows that the Financing to Deposit Ratio (FDR) has a positive and significant effect on Return On Assets (ROA) in the banking sector listed on the Indonesia Stock Exchange for the 2016-2021 period.

Based on the results of regression Coefficients shows that the coefficient of the Capital Adequacy Ratio (CAR) variable is -0.274 and is significant at 0.432. Significant greater than 0.05 then it can be in conclude that the Capital Adequacy Ratio (CAR) negative and not significant effect on Return On Assets ( ROA).

Based on the results of the Coefficients regression, it shows that the coefficient of the variable 1 Non Performing Loans (NPL) worth 0.196 and a significant value of 0.046. Significantly smaller than 0.05 then it can be taken conclusion that Non Performing Loan (NPL) positive and

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significant effect on Return On Assets (ROAs).

Based on the results of the Coefficients regression, it shows that the coefficient of the variable l Current R atio (CR) is 0.808 and significant worth 0.119. Significantly more big of 0.05 so Can in take conclusion that Current Ratio (CR) positive effect and not significant. to return On Assets (ROA).

Based on the results of the regression Coefficients show that coefficient variable I financing to Deposits Ratio (FDR) worth 0.237 as well as significant worth 0.042. Significantly more big from 0.05 so Can it is concluded that the Financing to Deposit Ratio (FDR) has a positive and significant effect on Return On Assets (ROA).

# CONCLUSION

Based on the results of the research conducted, it can be concluded that:

1. Partially, the Capital Adequacy Ratio (CAR) has a negative and insignificant effect on Return On Assets (ROA) in the banking sector listed on the Indonesia Stock Exchange from 2016 to 2021 with a significant value of 0.432 > 0.05.

2. Partially Non Performing Loans (NPL) have a positive and significant influence on the Return On Assets (ROA) of the banking sector listed on the Indonesia Stock Exchange from 2016 to 2021 with a significant value of 0.046 <0.05.

3. Partially, the Current Ratio (CR) has a positive and insignificant effect on the Return On Assets (ROA) of the banking sector listed on the Indonesia Stock Exchange from 2016 to 2021 with a significant value of 0.289 > 0.05.

4. Partially the Financing to Deposit Ratio (FDR) has a positive and significant effect on the Return On Assets (ROA) of the banking sector listed on the Indonesia Stock Exchange from 2016 to 2021 using a significant value of 0.042 > 0.05.

# BIBLIOGRAPHY

- I Ketut Sudarmanta. 2016. DETERMINATION PROFITABILITY SECTOR BANKING IN
- EXCHANGE EFFECT INDONESIAN . Journal Economy & Business Vol. 3,No2.Sep 2016:Pg 13-21.
- Nenda Nurjanah Niode, Chabachib. 2016. INFLUENCE CAR, FINANCING, NPF, AND BOPO TO ROA BANK **SHARIA GENERAL** IN INDONESIA PERIOD 2010-2015 . JOURNAL OF Volume Management 5, Number 3, Year 2016:Page 1-1 congratulations Fajari1, Sunarto. 2017. CAR EFFECT. LDR NPLs. BOPO AGAINST PROFITABILITY BANK **STUDIES** CASE ( COMPANY BANKING WHICH RECORDED IN **INDONESIA** STOCK EXCHANGE PERIOD NATIONAL 2011 TO 2015). SEMINAR MULTI DISCIPLINE KNOWLEDGE & CALL FOR PAPERS 3rd UNISBANK
- Ayu Chintya Arie Zeuspita. 2019. EFFECT OF CAR, NPL, DER AND LAR ON ROA IN COMMERCIAL BANKS ON THE INDONESIA STOCK EXCHANGE. Journal of Management, Vol. 8, No. 12, 2019 : 7411-7430.

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Research of Applied Science and Education V17.i4 (935-942)

E-ISSN: 2460-5611

- Rista Saritadevi. 2021. EFFECT OF NON PERFORMING LOAN (NPL) AND CAPITAL ADEQUACIES RATIO (CAR) TO PROFITABILITY (ROA) (STUDIES CASE ON PT. ADIRA DYNAMICS MULTI FINANCE TBK WHICH REGISTERED IN EXCHANGE EFFECT
- INDONESIA) . Journal Student Accounting , Volumes 2 No.3 (December 2021).
- Kevin Muharam Asysidiq, Bambang Sudiyatno. 2022. Effect of CAR, NPL, LDR, GDP and Inflation To ROA On Bank General Private National Foreign exchange Which Registered in stock Exchange Indonesia Period 2017-2021.Jurnal Mirai Management Volumes 7 Issue 2: Pages 66 – 84
- Marismiati, Ainun Yulyani Maysarah Marbun. 2022. EFFECT OF CURRENT RATIO AND DEBT TO EOUITY RATIO TO PROFITABILITY (RETURN ON ASSETS) ON COMPANY PHARMACY WHICH REGISTERED IN THE EXCHANGE EFFECT INDONESIA. JOURNAL land Volumes 3, Number 2, July 2022.
- Bambang Wahyudi Wicaksono. 2021. EFFECT OF CURRENT RATIO, DEBT EQUITY ON RETURN ON ASSETS WITH SIZE AS Α MODERATION VARIABLE ON COMPANY PROPERTY AND REAL ESTATES WHICH REGISTERED ON EXCHANGE EFFECT

- INDONESIA PERIOD 2018-2020 . Journal Management business , Vol. 24 No. 3 / 2021.
- Soegiarto. 2018. Influence CR, DER, NPF To ROA BMT Nurus Sa'adah In Pekalongan.
- RESEARCH & JOURNAL ACCOUNTANCY Volume 2 Number February 2 2018.
- Siti Khoiriyah, Wirman. 2021. THE INFLUENCE OF NPF AND FDR ON PROFITABILITY (ROA) BANK GENERAL SHARIA IN INDONESIAN . Journal Economy Islam Vol. 12 No. 1 (2021).
- Mamduh M. Hanafi. & Abdul Halim. 2016. Analysis Report Finance. Analysis, Profitability. Hal. 155. UPP STIM YKPN, JL. Palagan Soldier Student Km.7 Yogyakarta 5558 1.
- Pandjaitan DRH & Aripin Ahmad. (2017). Method Study For Business. city Lampung: Aura Publishing.
- Digdowiseiso, Basin. (2017). Methodology Study Economy And Business. Jakarta South: Publishing Institution National University (LPU-UNAS).

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