

Analysis of the Influence of Asset Ratio, Working Capital Ratio, and Cost Efficiency Ratio on Financial Performance Ratio in Commercial Banks in Indonesia in 2017

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ABSTRACT

The Banking Industry plays an important role for economic development as a Financial Intermediary or intermediary for parties with excess funds and those who need funds. Banks are an industry whose main activity is the collection of funds from the public and then channeling them with the aim of earning income. It is important for banks to maintain public trust. The purpose of this study is to find out and get information about the Analysis of the Effect of Working Capital Ratio (expressed by Capital Adequacy Ratio/CAR, Net Interest Margin /NIM), Cost Efficiency Ratio (Operating Cost versus Operating Income/BOPO), Asset Ratio (Net Performing Loans/NPL, Loan to Deposit Ratio/LDR to Financial Performance Ratio/ Return On Assets/ROA for Commercial Banks on 2017, and to find out how much influence working capital ratios, cost efficiency ratios and bank assets to commercial bank financial performance ratios in Year 2017 Type of Descriptive Quantitative Research,, Data collection techniques using saturated data sampling where all members of the population are used as samples, which means the sample used is the same as the population.

INTRODUCTION

Large-scale/Multi-National companies have a strategy of placing part of the retained earnings that they obtain invested in the capital market. The activity of buying or selling shares on the Indonesia Stock Exchange is a trend of an alternative choice of long-term funding sources for companies. This includes companies in the banking sector.

As a financial intermediary—a middleman between people who need money and those who have extra—the banking sector contributes significantly to economic growth. According to Ali (2006), a bank is any financial organization that is authorized to conduct business as a bank, which includes accepting deposits of money entrusted to it by the general public, lending money to the general public and business community, accepting different types of debt securities that are submitted to the bank, and writing checks. Because many other business activities demand more cash than the firm owners can afford, and because not everyone uses their savings for everyday needs, the banking industry was founded (Jaya, 1998). One of the bank kinds in the Indonesian economy is the commercial bank. in accordance with Banking Law No. 10 of 1998. Commercial banks are those that conduct business in a traditional manner and/or in accordance with sharia law, and they offer payment traffic services as part of their operations. Because they strive to maximize profits in their business operations, commercial banks are sometimes known as commercial banks. Similar to other businesses, Indonesian citizens (WNI), Indonesian legal entities, or even foreign citizens and foreign legal organizations can form commercial banks. Government-owned, domestic, international, and mixed private (private and national) banks make up the ownership of commercial banks. Commercial bank business organizations might take the shape of regional businesses, cooperatives, or corporations.

Developments in the banking world that are very rapid and high levels of complexity can affect the performance of a bank. The high complexity of the banking business can increase the risks faced by banks in Indonesia. Indonesia's banking problems include 1. Depreciation of the rupiah, 2. Increase in the interest rate of Bank Indonesia Certificates (SBI) so that it causes an increase in non-performing loans, 3. Weak internal conditions of banks such as inadequate management, 4. Provision of credit to their own business groups and capital that cannot cover the risks faced by the bank cause the bank's performance to decrease. In the Seminar on Banking Restructuring in Jakarta 1998 (Etty M. Nasser & Titik Aryati: 2000) concluded several causes of declining bank performance; among others; 1. The increasing number of non-performing banking loans 2. The impact of the liquidation of banks on November 1, 1997 which resulted in a decline in public trust in banks and the government, thus triggering a massive recession. 3. The decreasing capital of banks and even negative net worth, due to the need to establish reserves, negative spreads, unprofitable, and others. 4. Many banks are unable to cover their liabilities, especially due to the decline in the rupiah exchange rate. 5. Violation of BMPK (Maximum Limit for Granting Credit). 6. The bank's capital or Capital Adequacy Ratio (CAR) does not reflect the real ability to absorb various risks and losses. 7.

Management is not professional. 8. Moral hazard. A decline in bank performance can also reduce public confidence.

According to PSAK 31, banks are defined as an industry whose operations depend on public trust, necessitating the maintenance of the bank's health level. In order for banks to meet their responsibilities to all parties that withdraw or disperse their deposits at any moment, they must maintain their liquidity. Given that banks are organizations that serve to enable payment flow, it is becoming more and more crucial to be prepared to fulfill responsibilities at all times. The ability of the management to protect the financial secrets of the clients entrusted to them, as well as the security of funds or other assets entrusted to the bank, is another factor that determines the success of the bank's operations in addition to the liquidity factor. Because banks' primary function is to collect money from the public and then disburse it in order to generate revenue, it is critical to preserve public confidence in banks.

As a result, Bank Indonesia enforces bank health regulations. The ability of a bank to conduct banking operations normally and to correctly fulfill all of its responsibilities in a manner that complies with applicable banking regulations is known as *kesehatan bank*. According to this bank health rule, banks must always be in good health in order to avoid hurting those who work in banking. From the collecting of money to their use and distribution, Indonesia's bank health regulations address many facets of bank operations (Totok Budisantoso and Sigit Triandaru: 2006). CAMELS, or capital considerations, asset quality, management, profitability, liquidity, and sensitivity to market risk, are all evaluated as part of the bank's overall health level assessment. The Bank is required to prepare and present financial statements in the format and scope specified by Bank Indonesia Regulation Number: 3/22/PBI/2001 concerning Transparency of Bank Financial Condition. These financial statements include: 1. Annual Report; 2. Quarterly Financial Statements; 3. Financial Statements of Monthly Publications; and 4. Consolidated Financial Statements.

LITERATURE REVIEW

Bank Concept

Banks are financial institutions that raise the general public's level of living by collecting money from the general public and redistributing it as credit or other financing (Law No. 10 of 1998). Banks serve as a financial bridge connecting people in need of money and those with surplus funds. Commercial banks and people's credit banks (BPR) are the two sorts of banks that exist in practice; they have different functions and responsibilities.

Banking Performance (Bank Performance)

The success that banks have in their operations, including in terms of finances, marketing, fundraising, and fund distribution, is referred to as bank performance. An assessment of the bank's financial situation over a specific time period, including fundraising and fund disbursement, is provided by bank performance with relation to the financial component. This is often evaluated using metrics related to capital sufficiency, asset quality, liquidity, and profitability. The state of the bank's health provides insight into its performance.

The minimum capital (also known as the Capital Adequacy Ratio, or CAR), asset quality, management, profitability, and short-term debt repayment are all indicators of the bank's health.

Bank Health Level

A bank can be said to be healthy if the bank is able to maintain public trust, and is able to help smooth payment traffic and can help the government in carrying out its policies, especially policies in the monetary sector. In order for a bank to be able to carry out its functions properly, a bank must have sufficient capital so that the bank is able to maintain its business continuity and can fulfill its obligations at all times.

Banking Financial Statements

According to Munawir (2004:2), financial statements are the end product of an accounting procedure that serves as a means of communication between parties interested in the bank's data or operations and financial data. Financial statements, according to Harahap (2002:7), are the end product of an accounting activity process that serves as information for users as a foundation for decision-making activities and can also serve as a reference for a company's ability to meet its objectives.

According to Law Number 7 of 1992 governing banking, a bank is a company that raises the standard of living for a large number of people by collecting money from the public in the form of deposits and distributing it to the community. In order to support the implementation of national development and increase the equitable distribution of economic growth and national stability toward improving the welfare of the people, the Bank plays a very strategic role in national development. Its primary function is to raise and distribute funds (Banking Law, 1992).

Additionally, banks' operations differ from those of manufacturing firms and other service providers. The majority of bank assets are liquid, with very few being fixed. As a result, its assets and liabilities have an extremely high turnover rate.

Objectives of Financial Statements

That is, to give users information that will help them make decisions about a company's financial status, performance, and changes in that status.

Financial statement user

Taxation

The tax authorities need the company's financial statements to be studied and analyzed which will later be used to determine the amount of tax that must be paid by the company.

Employees

Employees are interested in knowing the position and conditions under which they work in the hope of knowing the extent to which the company is able to provide welfare to them. Company Owner The company owner is interested

in seeing the company's progress in creating profits and developing the bank's business.

Management

To manage a good bank management needs to regulate liquidity levels, assets, capital to achieve optimal levels of profitability. The right way to achieve this goal is to conduct a financial analysis so that management can make the right decisions.

Government

The government considers banks as a vital business unit with the task of helping to regulate the economic activities of a country in general and monetary in particular.

Society

As fund owners, the public is interested in the bank's financial statements to understand how the bank has developed overall, particularly with relation to liquidity. In order to provide fund owners with an early warning system, financial statements are analyzed and interpreted. To help in decision-making, financial statements are meant to give information about a company's performance, financial status, and changes in that status. Financial statements must be created in a way that can satisfy the needs of all parties involved since they are of interest to a wide range of parties.

Previous Research

Wisnu Mawardi (2005) examined how the financial performance (ROA) of Indonesian commercial banks with total assets under one trillion rupiah was affected by operating efficiency as measured by operating costs relative to operating income (BOPO), credit risk (NPL), market risk (NIM), and capital (CAR). The data utilized was periodized between 1998 and 2001. The study's findings demonstrate that credit risk (NPL) has a negative and significant impact on ROA, market risk (NIM) has a positive and significant impact on ROA, operating efficiency (BOPO) has a negative and significant impact on ROA, and there is no capital effect (CAR) on ROA's financial performance.

Frame of Mind

According to Uma Sekaran, Sugiyono (2011 "The frame of mind is a conceptual model of how theory relates to various factors that have been identified as important, so the frame of mind is an understanding that underlies other understandings, a most basic understanding and becomes the foundation for any thought or a form of process from the whole of the research to be carried out." A positive mindset will logically explain how the factors under study relate to one another. Therefore, it is theoretically required to explain the relationship between independent and dependent variables. If moderators and intervening variables are included in the study, it is also necessary to explain their inclusion. A study paradigm based on a conceptual framework is then developed to represent the relationship between these factors. The author

provides a brief conceptual framework in the following image, which is based on the issues previously addressed by the author:

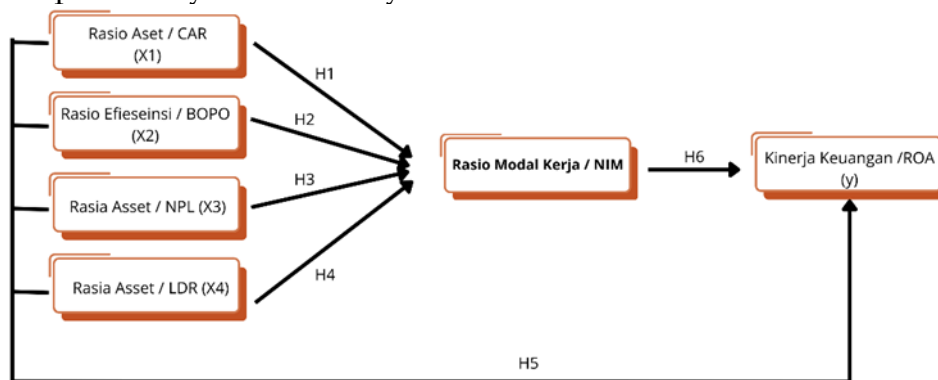


Figure 1. Frame of Mind

Information:

X1 = Independent Variable I, Asset Ratio / (*Capital Adequacy Ratio*/CAR)

X2 = Independent variable II, Cost Efficiency Ratio (*Operating Cost to Operating Income* / BOPO)

X3 = Free variable III, Bank Asset Ratio (*Non Performing Loan* / NPL)

X4 = Free variable IV, Bank Asset Ratio (*Loan to Deposit Ratio*/LDR)

X5 = Free variable III, Working Capital Ratio (*Net Interest Margin*/NIM)

Y = Bound variable, Financial Performance / Return on Assets ratio / (ROA)

D. Hypothesis

A hypothesis is a temporary conjecture of the formulation of a research problem, therefore the formulation of a research problem is typically arranged in the form of a question sentence," states Sugiyono (2004:51), who defines a hypothesis as follows. In Sari (2017)'s research, W. Gulo (2002: 57) states that a hypothesis is a claim that, although unknown at the time of revelation, may be tested empirically. We can connect theory to observation or observation to theory through hypotheses. The way that research and statistics define hypotheses differs fundamentally from one another.

METHODOLOGY

Although it also uses qualitative data as support, this research approach is quantitative descriptive, meaning it uses data that has been gathered and presented as numerical values. The distance between the researcher and the subject of the study is taken into account in quantitative research. Formal, standardized, and quantitative tools are used in quantitative research (Sukmadinata, 2006:95). Sugiyono (2017) asserts that this study approach is quantitative since the data is numerical and subjected to statistical analysis. According to Nur Indriantoro and Supomo (1999), this research can be classified based on its purpose as Basic Research, which is a type of research that is also related to problem solving, but has no influence in policy determination. Basic research is further classified in the type of inductive research. Inductive research aims to develop a theory or hypothesis through the disclosure of facts, where in this research the hypothesis developed will be systematically analyzed in order to produce a theory. The type of data used in this study is secondary data. Data in the form of bank financial ratios processed by the InfoBank Research Bureau

to the financial statements of commercial banks for the 2017 period which have been audited and then published in Info bank No.480 July 2018 Edition, the research time was from January 2019 to August 2019.

Population

The population in this study was 106 out of 115 commercial banks in 2017 with the following details:

Table 1. Study was 106 out of 115 commercial banks in 2017

NO	INFORMATION	NUMBER OF BANKS
1	1. Core Capital of Rp.30 Trillion and above (book 4)	7
2	1. Core Capital up to Rp.30 Trillion (Book2) 2. ASet Rp.100 Trillion and above	6
3	1. Core Capital up to Rp.30 Trillion (Book 3) 2. Assets of Rp.50 Trillion to 100 Trillion	11
4	1. Core Capital up to Rp.30 Trillion (Book 3) 2. Assets below Rp.50 Trillion and below	3
5	1. Core Capital 1 Trillion to Rp.5 Trillion and below (Book 2) 2. Assets of Rp.25 Trillion and Above	9
6	1. Core Capital 1 Trillion to Rp.5 Trillion and below (Book 2) 2. Assets of IDR 10 Trillion to IDR 25 Trillion	24
7	1. Core Capital 1 Trillion to Rp.5 Trillion and below (Book 2) 2. Assets below IDR 10 Trillion	19
8	1. Core Capital below 1 Trillion (Book 1) 2. Assets of IDR 5 Trillion and above	11
9	1. Core Capital below Trillion (Book 1) 2. Assets IDR 2.5 Trillion to 5 Trillion	3
10	1. Core Capital below Trillion (Book 1) 2. Assets below IDR 2.5 Trillion	10
11	1. Core Capital below Trillion (Book 1) 2. Assets below IDR 2.5 Trillion 3. Foreign Banks	3
12	Unrated Banks	9
	Total	115

Sampling

According to Sugiyono (2012:73), a sample is defined as a subset of the population whose characteristics must be authentically representative. The number of samples that will be drawn from a population is known as the sample size.

Types and Techniques of Data Collection

The type of data is in the form of financial ratios (processed by the Bank Info Research Bureau on the bank's financial statements for the 2017 period)

which have been audited and then published in the 480 July 2018 edition of Bank Info Magazine. The collection technique is in the form of secondary data, by means of non-participant observation, namely recording or copying the data listed in the "Rating of 115 Commercial Banks in Infobank Magazine in 2017".

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Variable Operational Description

Five independent variables and one dependent variable are used in this study, which is based on financial ratio measurements. The following are examples of independent variables: Non-Performing Loans (NPL), which is the ratio of non-performing loans to disbursed loans; Operating Expenses to Operating Income (BOPO), which measures operational efficiency; Non-Performing Loans (CAR), which is the ratio of capital to risk-weighted assets; and Loan to Deposit Ratio (LDR), which contrasts loans with third-party funds. According to Bank Indonesia Circular Letter No. 6/23/DPNP, the dependent variable is Return on Assets (ROA), which measures the bank's financial performance and is computed by dividing profit before taxes by the average total assets.

Data Analysis Methods/Techniques

In this study, the author tried to make an analysis with a calculation approach, namely such as Multiple Linear Regression Analysis, Model Summary, Anova, all of which were analyzed using statistical analysis of SPSS Release 21.0 computer. In addition, data analysis uses quantitative statistical analysis techniques that aim to decipher the properties and characteristics of variables.

RESEARCH RESULT AND DISCUSSION

Research Description

This study used a sample of banking companies in 2017. The distribution of samples used is as follows:

Table 2. Sample Distribution

Information	Sum
Number of Banking Companies	115
Companies affected by outliers	1
Unrated companies	8
Number of Rated Companies, which are Sample	106

The following descriptive statistical findings from 106 banking companies were derived from computer computations using the SPSS software:

The following descriptive statistical findings from 106 banking companies were derived from computer calculations using the SPSS software.

Table 3. Results of descriptive statistics from 106 businesses

Descriptive Statistics								
	N	Range	Minimum	Maximum	Sum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
CAR	106	1.99	5.51	7.50	767.95	7.2448	.04586	.47216
NPL	106	12.50	.00	12.50	1072.34	10.1164	.31448	3.23778
BOPO	106	7.50	.00	7.50	600.40	5.6642	.25417	2.61688
LDR	106	3.46	4.04	7.50	776.51	7.3256	.05526	.56897
NIM	106	8.07	1.22	9.29	475.11	4.4822	.10093	1.03917
ROA	106	7.50	.00	7.50	453.53	4.2786	.25930	2.66965
Valid N (listwise)	106							

Source: Data Processing Results (SPSS 21), 2019

From table 6 it can be seen that:

1. The average Capital Adequacy Ratio (CAR) in 2017 was 7.2448. Companies with the lowest CAR value were Bank Bukopin, Bank Banten, Bank Duba Panin Syariah (see attachment 1) with a value of 5.51. Meanwhile, the company with the highest average CAR value is 7.50. The average CAR value of banks in 2017 was 0.50 smaller than the CAR value required by Bank Indonesia which was 8%.
2. The average ratio of operational efficiency / Operating Cost to Operating Income (BOPO) of 106 banks in 2017 was 5.6442. There are 7 banks with the lowest BOPO value, namely Bank Resonia Perdana, Bank QNB, Bank BNP, Bank of India Indonesia, Bank Banten, BJB Syariah, Bank Panin Dubai Syariah, Bank MNC International, Bank Agris (see appendix 1) with a value of 00.00. Meanwhile, there are several banks with the highest BOPO score, namely with a value of 7.50.
3. The average Working Capital Ratio / Net Interest Margin (NIM) of 106 banks in 2017 was 4.4822. The bank with the lowest NIM value is QNB Bank (see appendix 1) with a value of 1.22. Meanwhile, the bank with the highest NIM value is Bank Papua with a value of 9.29.
4. The average Asset/Non-Performing Loan (NPL) ratio of 106 banks in 2017 was 10.1164. This shows that the value of NPLs in that year is still within the maximum NPL required by Bank Indonesia, which is 5%. Banks with the lowest NPL value are Ban Bukopin, Bank Papua, BJB Syariah, Bank Panin Dubai Syariah, Bank Amar Indonesia, Bank Artos Indonesia (see appendix 1) with a value of 0.0000. Meanwhile, the bank with the highest NPL value is Bank National Nobu with a value of 12.48.
5. The average Asset/Loan To Deposit Ratio (LDR) of 106 banking companies in 2017 was 7.3256. The bank with the lowest LDR value is Bank Mitra Niaga of 4.04 (see appendix 1) The rest of the average bank has a value of 7.50. (Data source obtained from Info Bank Magazine July 2018 Edition)

Research Analysis

Classic Assumption Test

Normality Test

The purpose of the normality test is to determine whether or not the independent variable and the bound variable in the regression model have a normal distribution. A normal or nearly normal data distribution is a sign of a strong regression model. Examining a histogram that contrasts observational data with distributions that are similar to normal distributions is one of the simplest methods to determine if the data distribution is normal or not.

But merely glancing at the histogram can be deceptive, particularly when sample sizes are tiny. Examining the Normal Probability Plot, which contrasts the cumulative distribution of the actual data with the cumulative distribution of the normal distribution, is a more trustworthy approach. The data charting will be compared to the diagonal line, which is formed by the normal distribution. The line depicting the actual data will follow the diagonal line if the data distribution is normal. Ghozali (2001).

Based on the results of the SPSS test in attachment 3, the Normal Probability Plot formed is as follows:

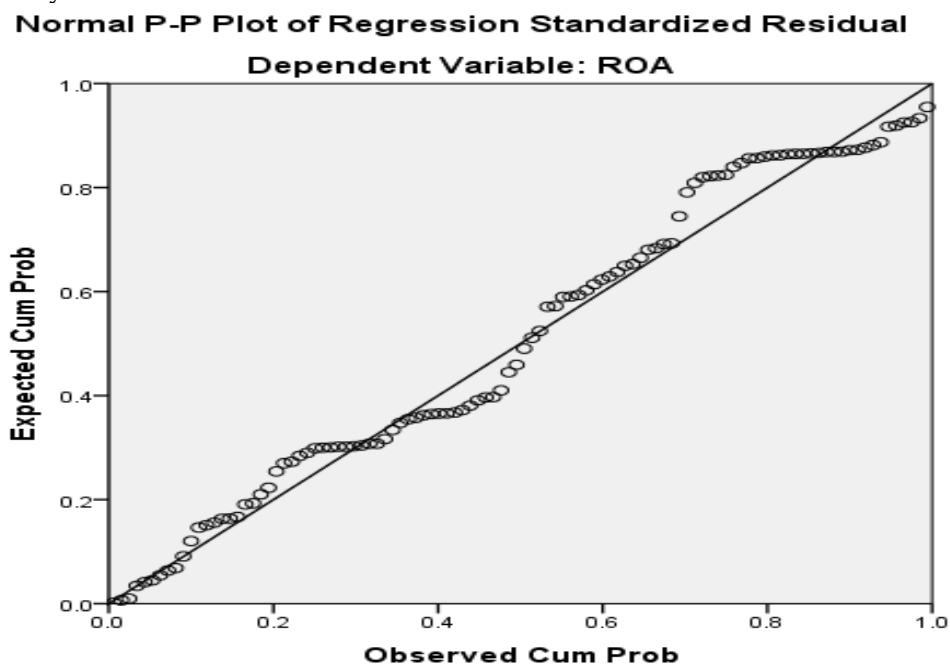


Figure 3. Normal Probability Plot

If you look at the graph above, the data from all data is distributed normally. This is because all data spreads along the Normality line.

Multicollinearity Test

Multicollinearity is also evident in the value of tolerance and its adversary, the Variance Inflation Factor (VIF), according to Imam Ghozali (2001: 63). These two metrics show which of the independent variables the other one describes. Simply put, each free variable regresses to the other independent variable and becomes a bound variable. The variability of a chosen independent variable that

cannot be accounted for by other independent variables is measured by tolerance. Because $VIF = 1/\text{tolerance}$, a low tolerance value corresponds to a high VIF value, which denotes a high collinearity. A tolerance number above 0.10 or equivalent to a VIF value below 10 is the frequently used cutoff threshold. The amount of collinearity that can still be accepted must be ascertained for each analysis.

Table 4. The five independent variables

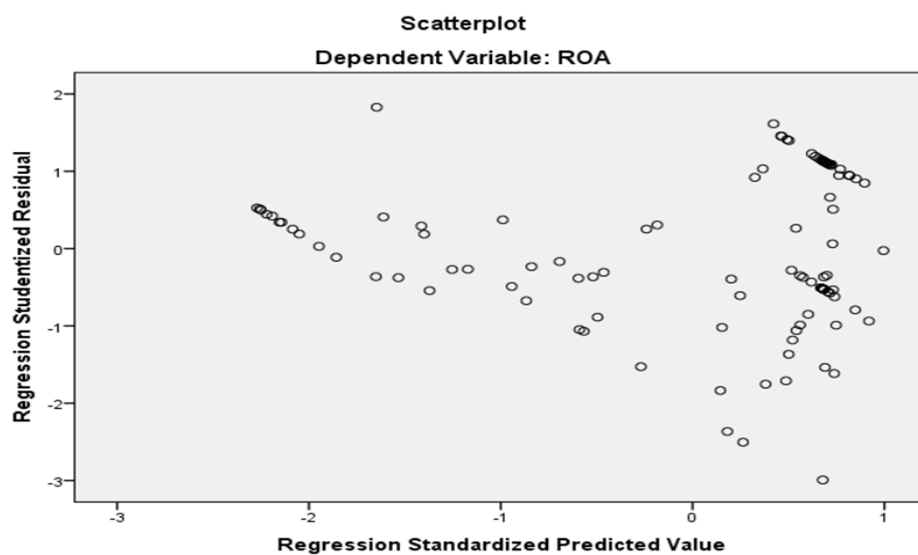
Model	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
CAR	.690	1.450
NPL	.527	1.898
LDR	.918	1.089
BOPO	.454	2.202
NIM	.668	1.498

Source: Data Processing Results (SPSS 21), 2019

The five independent variables show the findings of the aforementioned study; the tolerance value is greater than 0.10 and the VIF number is less than 10. Therefore, it can be said that multicollinearity is not an issue with the regression model. Therefore, it makes sense to use the current regression model.

Heterokedasticity Test

Due to the influence of hard-to-separate individual variables, the correlation of heteroscedasticity is the bias of variance that renders the significant test incorrect. The plot graph between the dependent variable's projected values and its residual can be used to determine whether there is heteroscedasticity between independent variables. Below is a graph showing the heterokedasticity test findings from appendix 4.



It is clear from this graph that there is no heteroscedasticity issue in this regression test because the data (dots) are dispersed equally above and below the

zero line, do not congregate in one location, and do not form any particular pattern.

Autocorrelation Test

In the regression model, autocorrelation indicates that the sample members who are sorted according to time have a correlation with one another. To determine whether autocorrelation exists in a regression model, the Durbin Watson test (DW test) is used to measure its value. Under the following circumstances:

Less than 1.10 = There is an autocorrelation

1.10 to 1.54 = No conclusion

1.55 to 2.46 = No autocorrelation

2.46 to 2.90 = No conclusion

More than 2.91 = There is an autocorrelation

The existence of autocorrelation and large error standards causes bias or deviation. In the regression test seen in appendix 3, the Durbin-Watson value of 1.507 was concluded that there was no autocorrelation problem.

Multiple Linear Regression Test

Multiple linear regression is the statistical method employed in this investigation. The goal of this research is to ascertain how much the independent variables—the working capital ratio (CAR, NIM), the cost efficiency ratio (BOPO), and the asset ratio (NPL, LDR)—influence the dependent variable, ROA. A multiple regression equation can be used to determine the degree to which independent factors (CAR, NPL, LDR, BOPO, and NIM) influence dependent variables (Return on Asset ratio) collectively.

1. Multiple Regression Analysis aims to find out whether or not there is an influence of five independent variables (X.) on the bound variables (Y).
2. The t-test aims to find out whether or not there is a partial (self) influence given by the independent variable (X) on the bound variable (Y).
3. The F test aims to find out whether or not there is a simultaneous influence (together) given by the free variable (X) on the bound variable (Y.)
4. The Determination Coefficient functions to find out what percentage of the influence given by the independent variable (X) simultaneously on the variable (Y).

Hypothesis Formulation:

Ha1= there is an influence of CAR(X1) on ROA (Y)

Ha2= there is an effect of BOPO (X2) on ROA (Y)

Ha3= there is an effect of NIM (X3) on ROA (Y).

Ha4= there is an influence of NPL (X4) on ROA (Y)

Ha5= there is an influence of LDR (X5) on ROA (Y)

The confidence level is 95%, $\alpha = 5\%$. Based on computer calculations using the SPSS 21 program, the following regression results were obtained:

Table 5. Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-.751	3.373		-.223	.824
CAR	-.115	.379	-.020	-.303	.762
NPL	-.058	.063	-.070	-.918	.361
LDR	.286	.272	.061	1.052	.296
BOPO	.922	.084	.904	10.952	.000
NIM	-.194	.175	-.076	-1.111	.269

a. Dependent Variable: ROA

Source: Data Processing Results (SPSS 21), 2019

The regression equation can be inferred from the analysis results using the SPSS software. The equation for multiple linear regression, with the smallest square equation (OLS), which is formed is:

$$Y = -751 - 0,115X_1 + 0,922X_2 - 0,194 X_3 - 0,058X_4 + 0,286X_5$$

From the results of the analysis, it can be seen that the most influential independent variable is the Cost Efficiency Ratio/BOPO with a coefficient of 0.922. Then followed by the Asset Ratio / Loan to Deposit Ratio / LDR with a coefficient of 0.286, and the Working Capital Adequacy Ratio / Capital Adequacy Ratio / CAR with a coefficient of -0.115, Net Interest Margin/ NIM with a coefficient value of -0.194 and Asset/Non Performing Loan/NPL Ratio with a coefficient value of -0.058. From the Multiple Linear Regression equation, it can be seen that:

The independent variables of Cost Efficiency Ratio / BOPO and Asset Ratio / Loan to Deposit Ratio / LDR have a positive effect on the Return on Asset / ROA Ratio which means an increase in the value of the Cost Efficiency Ratio / BOPO and Asset Ratio / Loan to Deposit Ratio / LDR in the company, thus affecting the Financial Performance Ratio / Return on Asset / ROA. Meanwhile, the variables of Capital Adequacy Ratio CAR, Net Interest Margin/./NIM, Asset/Non Performing Loan/NPL Ratio have a negative influence on the Financial Performance Ratio/ Return on Asset/ROA, which means a decrease in the Working Capital Ratio / Capital Adequacy Ratio / ./NIM, Asset Ratio / Non Performing Loan / NPL resulting in a decrease in the Financial Performance Ratio / Return on Asset / ROA. The regression coefficient test aims to test the significance of the relationship between independent variables (X) and dependent variables (Y) both jointly (with the F test) and individually (with the t-test).

Determination Test

The strength of the influence of the free variable (X) on the variation of the bound variable (Y) can be determined by the magnitude of the value of the determinant coefficient (R²), which is between zero and one.

Table Results of Data Processing (SPSS 21), 2019. Determination Test

Table 6. Model Summary

Model	R	R Square	Adjusted Square	Std. Error of the Estimate
1	.831 ^a	.691	.675	1.52107

Source: Data Processing Results (SPSS 21), 2019

The value of the determinant coefficient (R²) Table 5.6 shows the value of R square of 0.691. This means that 69.10% of the Financial Performance Ratio / Return On Asset is influenced by five independent variables, namely Working Capital Ratio (CAR, NIM), Asset Ratio (NPL, LDR), Cost Efficiency Ratio / BOPO. While the remaining 30.90% was influenced by other causes outside the model.

F-test (F-test)

The F-test is intended to determine the influence of independent variables, Working Capital Ratio, Asset Ratio, Cost Efficiency Ratio (CAR, NPL, LDR, BOPO and NIM) simultaneously on the Financial Performance / Return on Assets of Commercial Banks in 2017. Assuming the following:

1. The value of Sig < 0.05, or F is calculated > F table, then there is a simultaneous influence of variable X on Variable Y.
2. The value of Sig > 0.05, or F is calculated < F table, then there is no simultaneous influence of variable X on Variable Y.

Formula for calculating F Table :

Df (n1)=k-1 → 5-1=4

Df(n2) =n-k-1 → 106-5-1 =100

F Tabel =F(k; n-k-1)=F(5; 106-5-1)=F(5; 100) =2.30

K=total variable (free)

N= number of samples

1=variable terikat

Table 7. Regression Results of the F Test

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	516.975	5	103.395	44.689	.000 ^b
	Residual	231.364	100	2.314		
	Total	748.339	105			

a. Dependent Variable: ROA

b. Predictors: (Constant), NIM, NPL, LDR, CAR, BOPO

Source: Data Processing Results (SPSS 21), 2019

From the calculation results, the F value was 44,689 greater than the F in Table 2.30 with a P value of 0.000. From the results of this F test, it is concluded that the variables of Working Capital Ratio, Asset Ratio, Cost Efficiency Ratio (CAR, BOPO, NIM NPL, LDR) together have a significant influence on Financial Performance / ROA in Commercial Banks in 2017.

Test (t-test)

The purpose of this t-test is to examine the significance of constants and dependent variables or to ascertain the partial (individual) influence of independent factors (CAR, BOPO, NIM, NPL, LDR,) on dependent variables (ROA). Or if:

1. The value of Sig < 0.05, or t calculated > t table, then there is an influence of variable X on Variable Y. (Criterion 1)
2. Sig value > 0.05, or t calculated < t table, then there is no influence of variable X on Variable Y.

Formula for calculating T Table:

$$t \text{ table} = t(a/2 ; n-k-1) = t(0.05/2 ; 106-5) = t(0.025; 101) = 1,986$$

K= sum of variables

N= number of samples

Table 8. T Test Regression Results

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-.751	3.373		-.223	.824
1 CAR	-.115	.379	-.020	-.303	.762
NPL	-.058	.063	-.070	-.918	.361
LDR	.286	.272	.061	1.052	.296
BOPO	.922	.084	.904	10.952	.000
NIM	-.194	.175	-.076	-1.111	.269

a. Dependent Variable: ROA

Source: Data Processing Results (SPSS 21), 2019

CONCLUSIONS AND RECOMMENDATIONS

Based on the findings of the research and discussion in Chapter V, it can be said that the bank's Financial Performance Ratio, as determined by Return on Assets (ROA), is not significantly impacted by the Working Capital Ratio, as determined by the Capital Adequacy Ratio (CAR). A regression coefficient with a negative value and a significance value higher than 0.05 both point to this. Similarly, despite having a negative connection direction, the variables of Net Interest Margin (NIM) and Non-Performing Loans (NPL) did not exhibit a meaningful partial influence on ROA.

On the other hand, it has been demonstrated that the Cost Efficiency Ratio (BOPO) significantly and favorably affects ROA. These findings demonstrate that banks' potential for higher profits, as measured by ROA, increases with their operational costs. In the meantime, ROA and the Loan to Deposit Ratio (LDR) are positively correlated, although the difference is not statistically significant.

The five independent variables—CAR, BOPO, NIM, NPL, and LDR—all significantly impacted ROA at the same time. This is demonstrated by the determination coefficient (R^2) of 0.691, or 69.10%, which indicates that the five ratios account for 30.90% of the variation in ROA, with other factors outside the scope of this study model influencing the remaining 30.90%.

Based on the conclusion mentioned above, a number of suggestions were prepared as follows:

1. Advice to bank/institutional policymakers that the company's performance can be improved by implementing Risk Management consistently and consistently and maintaining Non-Performing Loans (NPLs) of less than 5%. Increasing profits can also be done by optimizing existing capital. The addition of new products is also important because it can contribute to profit from fee-based income.
2. Suggestions for further research should add independent variables such as the inflation rate and the influence of exchange rate loyalty. The limitation of this study is that it only uses secondary data, namely bank publication reports, it is hoped that future research can reach the aspect of bank management as carried out by Bank Indonesia in conducting bank health assessments using the CAMEL Rating System.
3. For future research, it is better to increase the research period, or replace the research period with a quarterly or per-semester period because the period used in this study is a per-year period, so that it can be used as a comparison between the research and the monthly, quarterly, and semester periods.

ADVANCED RESEARCH

Future research can be expanded by incorporating macroeconomic variables such as inflation rate, interest rate fluctuations, and exchange rate volatility to examine their moderating or mediating effects on banks' financial performance. Additionally, utilizing a longer observation period or a more granular time frame such as quarterly or semi-annual data could provide deeper insights into short-term financial dynamics and seasonal trends that are not captured in annual reports. Methodologically, future studies are encouraged to complement secondary data with qualitative approaches, such as interviews with banking executives or surveys involving risk management officers. This can enrich the understanding of internal decision-making processes and strategies that influence Return on Assets (ROA). Furthermore, incorporating the CAMEL (Capital, Assets, Management, Earnings, and Liquidity) Rating System as an analytical framework will enable researchers to conduct a more holistic evaluation of bank performance in line with regulatory assessments.

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