



ANALYSIS OF CAPITAL, ASSET QUALITY, PROFITABILITY AND LIQUIDITY TOWARDS PROFITABILITY IN BANKING COMPANIES IN INDONESIA STOCK EXCHANGE

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ARTICLE INFO

Article history:

Received: Mar 3, 2022

Revised: Apr 6, 2022

Accepted: May 20, 2022

Keywords: Capital, Asset Quality, Profitability, Liquidity and Profitability.

ABSTRACT

Commercial banks are banks that play an important role in advancing the nation through the products provided, and banks are a source of income for the state. For this reason, it is very important to know the management performance of Indonesian commercial banks listed on the Indonesia Stock Exchange through their profitability growth, this underlies the researcher using conventional commercial banks listed on the Indonesia Stock Exchange (IDX) as the object of research. Based on this description, this study aims to determine the effect of capital, asset quality, profitability and liquidity on profitability at conventional commercial banks listed on the Indonesia Stock Exchange. The population in this study are Conventional Commercial Banks listed on the Indonesia Stock Exchange (IDX). Banks that meet the requirements as a sample in this study are 40 banks. Then multiplied by 3 years period, starting from 2017–2019. So, the total number of observations (40 x 3) is 120 data units in this study. Regression analysis is basically a study of the dependence of the dependent variable with one or more independent variables. Based on the results of multiple linear regression, it can be seen that leverage has no effect on tax avoidance. This shows that companies that have high or low leverage ratio values during the first, second, and third quarters of 2020 do not affect the company's decision to take tax avoidance actions. Based on the results of multiple linear regression, it can be seen that company size has no effect on tax avoidance. The results show that both companies that have large and small asset values during the first, second, and third quarters of 2020 do not influence the company's decision to take tax avoidance actions.

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1. Introduction

According to the Law of the Republic of Indonesia No. 10 of 1998 concerning banking, it is stated that banking is everything related to banks, including institutions, business activities, as well as methods and processes in carrying out their business activities. Bank is a business entity that collects funds from the public in the form of credit and or other forms in order to improve the standard of living of the people. The banking sector has a function as a financial intermediary (financial intermediary) between parties with excess funds (surplus funds) and those who lack funds (deficit funds), banks also function as institutions that facilitate the flow of payment traffic. Because of this role, banking performance also has a major impact on the world economy and the financial system in Indonesia. (Pinasti & Mustikawati, 2018: 127).

According to Mustafah (2017: 6) the purpose of financial management is maximum profitability. Maximum profitability can be obtained from minimizing the level of risk. Companies with maximum profitability are expected to increase the value of the company. The main objective of bank operational activities is to maximize the profitability obtained (Sumbayak and Manda, 2020: 328).

This study uses the type of bank based on its function according to the Basic Banking Law no. 14 of 1967 is a commercial bank that focuses on conventional commercial banks that have been listed on the Indonesia Stock Exchange (IDX). Conventional commercial banks that have been listed on the Indonesia Stock Exchange (IDX) are banks with fairly good performance and have large asset values, one of which is obtained by raising



public funds. This makes the bank have large funds to be channeled back to the community in the form of credit, so that indirectly the bank carries out its performance well so as to increase the bank's profit or profit.

Profitability is a ratio used to measure a bank's ability to manage its assets to generate profits. The level of profitability shows the ability of the bank's capital to earn profits (Dewi, 2017: 224). According to Susanto & Kholis (2016:13) Return on Assets is a ratio that is often used to assess a bank's profit or profitability because Bank Indonesia prioritizes the assessment of profitability on assets owned by a bank. The greater the value of the Return on Assets of a bank, the better the bank's ability to generate profits (Harun, 2016: 68). This indicates that the level of profit obtained is getting bigger as well. With large profits, it indicates that the bank has a good health level.

The profitability of conventional commercial banks in 2019 decreased as seen from the 2019 Return on Assets which was lower than the 2017 and 2018 Return on Assets. In general, changes in profitability as measured by Return on Assets were influenced by several factors, namely: Capital Adequacy Ratio which is a measurement of capital, Non-Performing Loan which is a measurement of asset quality, BOPO which is a measurement of profitability, and Loan to Deposit Ratio which is a measurement of liquidity (Harun, 2016).

Asset quality is an assessment of asset condition and adequacy in credit risk management (Utami & Tasman, 2020: 387). According to Krisdianto & Takarini (2020: 101) Non-Performing Loan is the ratio of the total number of non-performing loans to the amount of credit extended by creditors to debtors. Receivables management is something that is very much needed by banks because providing credit is a bank operational activity that can pose risks (Dewi, 2017: 225). In the period 2017 to 2019 banks have increased Non-Performing Loans. Bank Indonesia has set a maximum limit of 5% for the Non-Performing Loan ratio. If a bank has a Non-Performing Loan ratio that is too high, it can cause the health of the bank to be disrupted which will affect the bank's performance due to the high number of bad loans that have the possibility of being uncollected. Banks with high levels of bad loans result in delayed revenue received so that profitability can decrease (Pinasti and Mustikawati, 2018: 131). With non-performing loans increasing, banks must take appropriate policies so that banks can overcome credit risks that may occur. This is in line with the research of Sumbayak and Manda (2020) with the results that Non-Performing Loans have a negative effect on profitability.

Profitability can be used to assess the level of business efficiency and profitability obtained by the bank concerned (Anjani et al., 2019). BOPO can be used to measure the efficiency of a bank's performance. The BOPO ratio is a comparison ratio between operating costs and operating income (Dewi, 2017: 224). In the period 2017 to 2019 banks had a fluctuating BOPO. The lower the BOPO ratio indicates the more efficient and the better the health of a bank (Susanto and Kholis, 2016: 14). The higher the bank's BOPO ratio shows the bank is inefficient and the bank's performance has decreased (Dewi, 2017: 225). With the condition of an inefficient bank, the bank must determine the right funding policy so that the bank can operate efficiently and gain profitability. The research of Sumbayak and Manda (2020) which states that BOPO has a significant positive effect on profitability.

Liquidity is a process of controlling liquidity tools that are easy to fulfill to meet bank obligations that must be fulfilled immediately (Siahaan & Asandimitra, 2016: 1). According to Krisdianto and Takarini (2020: 102) Loan to Deposit Ratio is used to assess bank liquidity by dividing all loans that have been disbursed by banks with third party funds. The Loan to Deposit Ratio states the ability to how far the bank can repay the funds that customers want to withdraw by relying on credit distribution as a source of liquidity (Sumbayak and Manda, 2020: 331). During the 2016 – 2019 period, conventional commercial banks had a declining Loan to Deposit Ratio. Banks must be able to maintain the level of liquidity through funding policies taken so that banks have good performance and are able to obtain profitability. Banks that have a Loan to Deposit Ratio less than the lower limit set by Bank Indonesia indicate that the bank is unable to redistribute the funds that have been raised. Banks that have a Loan to Deposit Ratio exceeding the upper limit set by Bank Indonesia show that the amount of credit disbursed has exceeded the funds raised (Krisdianto and Takarini, 2020: 102). In Sumbayak and Manda's (2020) research, the results show that the Loan to Deposit Ratio has a significant positive effect on profitability.

This research uses capital, asset quality, profitability and liquidity as the independent variable (X) and profitability as the dependent variable (Y). Commercial banks are banks that play an important role in advancing the nation through the products provided, and banks are a source of income for the state. For this reason, it is very important to know the management performance of Indonesian commercial banks listed on the Indonesia Stock Exchange (IDX) through their profitability growth, this underlies the researchers using conventional commercial banks listed on the Indonesia Stock Exchange (IDX) as the object of research. Based on this description, this study uses the title "analysis of capital, asset quality, profitability and liquidity against profitability in banking companies on the Indonesian stock exchange".



2. Methods

2.1 Research variable

The dependent variables used in this study are: Profitability and the variables used in this study are: Capital, Asset Quality, Profitability and Liquidity.

2.2 Sample and Population

The population in this study are Conventional Commercial Banks listed on the Indonesia Stock Exchange (IDX). The sampling technique in this research is purposive sampling. The total number of samples is 120 data units in this study.

2.3 Analysis Techniques and Hypothesis Testing

Analysis of the data in this study using a regression technique, namely multiple linear regression analysis which aims to determine the effect of the independent variable on the dependent variable. The t-test is done by looking at the level of significance, where the significance level used is 5%. In knowing whether or not there is a simultaneous influence of independent variables on the dependent variable, namely comparing the calculated F value (F count) with F table.

3. Results and Discussion

3.1 Multiple Linear Analysis.

Table 1 Multiple Liner Regression Results
Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations Partial	Collinearity Statistics	
	B	Std. Error	Beta				Tolerance	VIF
1 (Constant)	6,219	.882		7.049	.000			
X1 = CAR	-.053	.010	-.362	-5.104	.000	-.430	.699	1.432
X2 = NPL	.019	.065	.029	.297	.767	.029	.589	1,698
X3 = BOPO	-.055	.009	-.636	-6.371	.000	-.526	.583	1,714
X4 = LDR	-.001	.005	-.016	-.203	.839	-.020	.982	1.018

a. Dependent Variable: Y = ROA
source: processed data (attachment)

$$ROA = 0 + 1 CAR + 2 NPL + 3 BOPO + 4 LDR + i$$

$$ROA = 6.219 - 0.053 CAR + 0.019 NPL - 0.055 BOPO - 0.001 LDR + i$$

From the multiple linear regression equation above, it can be described as follows:

a. Constant (β_0) = 6.219.

The constant value of 6.219 indicates if the CAR (X1), NPL (X2), BOPO (X3) and LDR (X4) variables are zero or constant, then the ROA value increases by 6.219 units.

b. CAR Regression Coefficient (X1) = - 0.053

The regression coefficient value of CAR (X1) of -0.053 indicates a change in the opposite direction between CAR (X1) and ROA (Y), meaning that if CAR (X1) increases by one unit, ROA (Y) will decrease by 0.053 units. On the other hand, if the CAR (X1) decreases by one unit, the company's ROA (Y) will increase by 0.053 units with the assumption that the NPL (X2), BOPO (X3) and LDR (X4) variables are constant.

c. NPL Regression Coefficient (X2) = 0.019

The regression coefficient value of NPL (X1) +0.019 shows a unidirectional change between NPL (X1) and ROA (Y), meaning that if NPL (X1) increases by one unit, ROA (Y) will increase by 0.019 units. On the other hand, if the NPL (X1) decreases by one unit, the company's ROA (Y) will decrease by 0.019 units with the assumption that CAR (X1), BOPO (X3) and LDR (X4) are constant.

d. BOPO Regression Coefficient (X3) = -0.055

The regression coefficient value of BOPO (X3) of -0.055 indicates a change in the opposite direction between BOPO (X3) and ROA (Y), meaning that if the ROA (X3) increases by one unit, the company's ROA (Y) will decrease by 0.055 units assuming CAR (X1), NPL (X2), and LDR (X4) are constant.

e. LDR Regression Coefficient (X4) = - 0.001

The regression coefficient value of the LDR (X4) of -0.001 indicates a change in the opposite direction between LDR (X4) and ROA (Y), meaning that if the LDR (X4) increases by one unit, the company's ROA (Y) will decrease by 0.001 units with the assumption of CAR (X1), NPL (X2), and BOPO (X3) are constant.

3.2 Hypothesis testing

a. Simultaneous Test (F Test)

Table 2 F Uji test ANOVAa

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	63,685	4	15,921	16,497	.000b
	Residual	102,304	106	.965		
	Total	165,989	110			

a. Dependent Variable: Y = ROA

b. Predictors: (Constant), X4 = LDR, X2 = NPL, X1 = CAR, X3 = BOPO

Source: processed data (attachment)

It can be seen from the number Fcount = 16,497 with Sig. 0.00 < 0.05, it means that changes in the four variables CAR (X1), NPL (X2), BOPO (X3), and LDR (X4) are able to explain changes in the ROA variable (Y). The results of this analysis, the F test analysis (model fit test) showed significant results, it can be concluded that the multiple regression analysis tool used as an analytical tool is suitable or can be used as an analytical tool with a significant level of 0.00. Or in other words, this simultaneous analysis can be used as a tool to determine whether the analysis tool (Multiple Regression) used is suitable or not.

b. Partial Test (t Test)

Table 3. t test Coefficientsa

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	6,219	.882		7.049	.000		
	X1 = CAR	-.053	.010	-.362	-5.104	.000	.699	1.432
	X2 = NPL	.019	.065	.029	.297	.767	.589	1.698
	X3 = BOPO	-.055	.009	-.636	-6.371	.000	.583	1,714
	X4 = LDR	-.001	.005	-.016	-.203	.839	.982	1.018

a. Dependent Variable: Y = ROA

Source: processed (attachment)

- CAR (X1) has a negative and (significant) effect on ROA (Y), or can be accepted with a level of [Sig. 0.000 < 0.05: significant [negative]]
- NPL (X2) has no positive and (not significant) effect on ROA (Y), or is not acceptable with the level of [Sig. 0.0767 > 0.05: not significant [negative]].
- BOPO (X3) has a negative and (significant) effect on ROA (Y), or can be accepted with a level of [Sig. 0.000 < 0.05: significant [negative]].
- LDR (X4) has no negative and (not significant) effect on ROA (Y), or is not acceptable with the level of [Sig. 0.839 > 0.05: not significant [negative]].

c. Coefficient of Determination (R²)

Table 4. Coefficient of Determination Test (R²)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		Durbin-Watson
					R Square Change	Sig. F Change	
1	.619a	.384	.360	.98241	.384	.000	1.342

a. Predictors: (Constant), X4 = LDR, X2 = NPL, X1 = CAR, X3 = BOPO

b. Dependent Variable: Y = ROA

Source: processed data (attachment)

From table 4. it can be seen that the results of the calculation of the coefficient of determination R² [see R Square 0.384] or 38.4% while the remaining 61.6% [100% - 38.4%] are explained by variables other than variables; CAR (X1), NPL (X2), BOPO (X3), and LDR (X4).

3.3 Discussion

Based on the test results above, the model fit test used in this study shows that the multiple regression model produced is suitable for testing the proposed hypothesis.

a. Effect of capital on profitability

The results of the tests carried out in this study are not in line with the assumption that capital as measured by the Capital Adequacy Ratio has a positive effect on profitability as measured by Return On Assets. This study does not support the results of research conducted by Permatasari (2018) which states that capital measured using the Capital Adequacy Ratio has a positive effect on profitability as measured using Return On Assets. In this study, the capital measured using the Capital Adequacy Ratio has a negative effect on profitability as measured using Return On Assets, which shows that the increase and decrease in the value of the Capital Adequacy Ratio will affect the Return On Assets.

From the results of hypothesis testing, it shows that the capital calculated using the Capital Adequacy Ratio has a significant effect on profitability which is calculated using return on assets. Return on assets has a constant value of -0.053 with a significant level of $0.000 < 0.05$. The value of the regression coefficient owned by return on assets is negative, indicating the opposite direction of change between capital (X1) which is calculated using the Capital Adequacy Ratio and profitability (Y) which is calculated using return on assets. This means that if the capital (X1) increases by one unit, the profitability will decrease by 0.053 units. On the other hand, if the capital (X1) decreases by one unit, the profitability will increase by 0, 053 units with the assumption that the variables of asset quality (X2), profitability (X3), and liquidity (X4) are constant. The results of this study are in line with the research of Maulana and Titik (2018) and the research of Irman and Wulansari (2018) which show that the results of capital (X1) calculated using the Capital Adequacy Ratio have a significant negative effect on profitability (Y) which is calculated using Return On Assets.

b. Effect of asset quality on profitability

From the results of hypothesis testing shows that asset quality has no significant effect on profitability. The asset quality variable (X2) which is measured using Non-Performing Loan has a constant value of 0.019 with a significant level of $0.767 > 0.05$. The value of the regression coefficient owned by asset quality (X2) as measured using Non-Performing Loans is positive, indicating a unidirectional change between asset quality (X2) as measured using Non-Performing Loans and profitability (Y) as measured using Return On Assets. this means that if the asset quality (X2) as measured using Non-Performing Loans increases by one unit, the profitability as measured using Return On Assets will increase by 0.019 units. and vice versa,

This study has the result that asset quality as measured by Non-Performing Loan is not significant to profitability as measured using Return On Assets, meaning that if there is an increase or decrease in asset quality, it does not really affect profitability. This happened because of high credit distribution followed by an increase in non-performing loans and the lack of bank supervision in disbursing credit, so that the quality of assets measured using Non-Performing Loans did not have a major influence on profitability as measured by Return On Assets. Banks must pay attention to the regulations stipulated by Bank Indonesia regarding credit distribution, so that banks disburse loans to customers with strict supervision so that the level of bad loans owned by banks can be minimized. These results are in line with research conducted by Pinasti and Mustikawati (2018) and research by Krisdianto and Takarini (2020) that asset quality has no significant effect on profitability.

c. Effect of profitability on profitability

From the results of hypothesis testing, it shows that profitability calculated using BOPO has a significant effect on profitability calculated using Return On Assets. profitability variable has a constant value of -0.055 with a significant level of $0.000 < 0.05$. The value of the regression coefficient held by BOPO which is a measurement of profitability (X3) is negative, indicating a change in the opposite direction between BOPO which is a measurement of profitability (X3) and return on assets which is a measurement of profitability (Y). This means that if the BOPO, which is a proxy for profitability (X3), increases by one unit, the profitability (Y) as measured by return on assets will decrease by 0.055 units. and vice versa,

This study has the results of profitability which is calculated using the BOPO ratio and has a significant and negative effect on profitability with the Return On Assets proxy. The negative constant value of profitability calculated using BOPO indicates that if there is an increase in profitability as measured by BOPO, it shows a decreased level of efficiency, then profitability will decrease. Banks that have an increasing performance show that the bank is more efficient. Increasing bank performance can increase the trust that the

public gives to banks. If the operational activities carried out by the bank can run efficiently (in this case low profitability) it will increase the income generated by the bank.

These results are in line with the notion that BOPO which is a proxy for profitability has a negative significant effect on profitability using Return On Assets as a proxy, meaning that if profitability as measured by BOPO increases and decreases, it will affect profitability as measured by Return On Assets. These results are in accordance with the research of Sinung, et al (2016) and the research of Permatasati (2018).

d. Effect of liquidity on profitability

From the results of hypothesis testing, it shows that liquidity with a Loan to Deposit Ratio proxy has no significant effect on profitability using a Return On Assets proxy. The liquidity variable with Loan to Deposit Ratio as a proxy has a constant value of 0.001 with a significant level of $0.839 > 0.05$. The value of the regression coefficient held by the Loan to Deposit Ratio which is a proxy for liquidity (X4) is negative, indicating a change in the opposite direction between liquidity (X4) and profitability (Y). This means that if liquidity (X4) increases by one unit, profitability will decrease by 0.001 units. On the other hand, if liquidity (X4) has decreased by one unit, then profitability has increased by 0.001 units with the assumption that the variable capital (X1),

These results indicate that conventional commercial banks have not been able to fully channel the third party funds that have been collected to maximize the credit extended to the public. Banks have also not been able to apply the precautionary principle in providing credit because there are still banks that have liquidity which is measured using a very high Loan to Deposit Ratio that exceeds the upper limit provisions which were late set by Bank Indonesia regarding the Loan to Deposit Ratio. This indicates that an increase in the number of loans that can be extended by banks does not necessarily have an impact on the success of bank management in obtaining profitability. The disbursement of credit that is too high will have an impact on increasing the risk of risk exposure that can be faced by banks. Banks need to be more selective in channeling credit to the public, because inappropriate lending can lead to non-performing loans. The results of this study indicate that the increase and decrease in liquidity as measured using the Loan to Deposit Ratio does not significantly affect Return On Assets which is a proxy for profitability. The results of this study are in line with research conducted by Pinasti and Mustikawati (2018), research by Susanto and Kholis (2016) and research by Irman and Wulansari (2018). The results of this study indicate that the increase and decrease in liquidity as measured using the Loan to Deposit Ratio does not significantly affect Return on Assets which is a proxy for profitability. The results of this study are in line with research conducted by Pinasti and Mustikawati (2018), research by Susanto and Kholis (2016) and research by Irman and Wulansari (2018). The results of this study indicate that the increase and decrease in liquidity as measured using the Loan to Deposit Ratio does not significantly affect Return On Assets which is a proxy for profitability. The results of this study are in line with research conducted by Pinasti and Mustikawati (2018), research by Susanto and Kholis (2016) and research by Irman and Wulansari (2018).

4. Conclusion

Based on the results of the analysis and discussion that have been carried out previously, it can be concluded that the variables of capital, asset quality, profitability, and liquidity jointly affect the profitability variables of conventional banking companies on the Indonesia Stock Exchange for the 2017-2019 period.

Based on the results of hypothesis testing and referring to the formulation of the problem and research objectives, the following conclusions can be drawn:

- a. Capital contributes to the profitability of conventional banking companies listed on the Indonesia Stock Exchange for the 2017-2019 period. This shows that high and low capital will have an effect on profitability.
- b. The quality of assets does not contribute to the profitability of conventional banking companies listed on the Indonesia Stock Exchange for the 2017-2019 period. This shows that the high and low quality of assets does not really affect the profitability.
- c. Profitability contributes to the profitability of conventional banking companies listed on the Indonesia Stock Exchange for the 2017-2019 period. This shows that high and low profitability can have an influence on profitability.
- d. Liquidity does not contribute to the profitability of conventional banking companies listed on the Indonesia Stock Exchange for the 2017-2019 period. This shows that the level of liquidity is not too influential on profitability.



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