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Research Article

The Effect Of Capital, Liquidity And Asset Quality On Profitability In Banking In Indonesia

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Abstract

This study aims to study the effect of bank capital, liquidity and asset quality on banking profitability in Indonesia. The study used state-owned banks as the subject. The data used are company annual reports published from 2011 to 2020. The research method used is multiple regression analysis using panel data models. Based on the results of the analysis, it is known that CAR has no significant effect on profitability (ROA), while NPL and LDR have a significant negative effect on profitability (ROA).

Keywords

CAR, NPL, LDR, ROA.

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Introduction

The economic growth of a country cannot be separated from the country's financial and banking system. The better and healthier the financial and banking system in a country, the greater the impact on its economic progress. Banks, apart from being the key in the development of the country's economy, are intermediary parties who have the obligation to maintain their level of profitability as companies in general. A good level of profitability will make the bank a healthy company and can maintain the trust of its stakeholders, especially people who save funds and borrow funds from banks. In maintaining customer trust in banks, banks must be able to maintain their financial performance by getting the maximum possible profit in the short term and maintaining the company's sustainability in the long term. The sustainability of the company in the long term will depend on how the company manages its assets to be able to generate the largest possible profit. In addition to managing company assets, planning in the capital structure is an important thing that needs to be considered by the company. The decision in determining the company's capital structure is one of the company's strategic decisions.

For investors and other stakeholders, the soundness of the bank is one of the main priorities. Therefore, banks need to maintain the soundness of banks by using a measuring instrument. One of the tools to measure bank health is CAMEL analysis (Capital, Assets, Management, Earning, Liquidity). From this measuring tool, there are three main aspects that will be used in this research, namely Capital, Assets and Liquidity. For the capital aspect the variable used is the Capital Adequacy Ratio (CAR), for the asset aspect the variable used is Non-Performing Loan, and for the liquidity aspect the variable used is Loan to Debt Ratio. These aspects are then assessed using financial ratios so that they can assess the financial condition of banking companies (Kasmir, 2002). Then, in assessing profitability, this study uses Return on Assets as the variable. Banks in general have the main function to collect funds from the public in the form of savings and channel them back in the form of loans. The healthier a bank is, the more people will save their money in the bank. And the higher the funds deposited in the bank, the higher the loan that can be channelled by the bank to the public. Of course this will have an impact on the profits that can be received by the bank, because the bank's main income comes from loan interest. According to Brigham and Houston (2010) to measure the financial performance of banks, the ratio used is the profitability ratio because this ratio includes debt ratios, activity ratios and liquidity ratios. The profitability ratio consists of ROE, which is a ratio that explains the number of return on capital to create returns, and ROA which is a ratio that shows the ability of all available assets and is used in making profits. After the global financial crisis that occurred in 2008, the world economy experienced significant disruptions. Many companies in the financial sector, suffered heavy losses in various countries ranging from China, Europe and even Indonesia. In Indonesia, this can also be seen from the ROA data below.

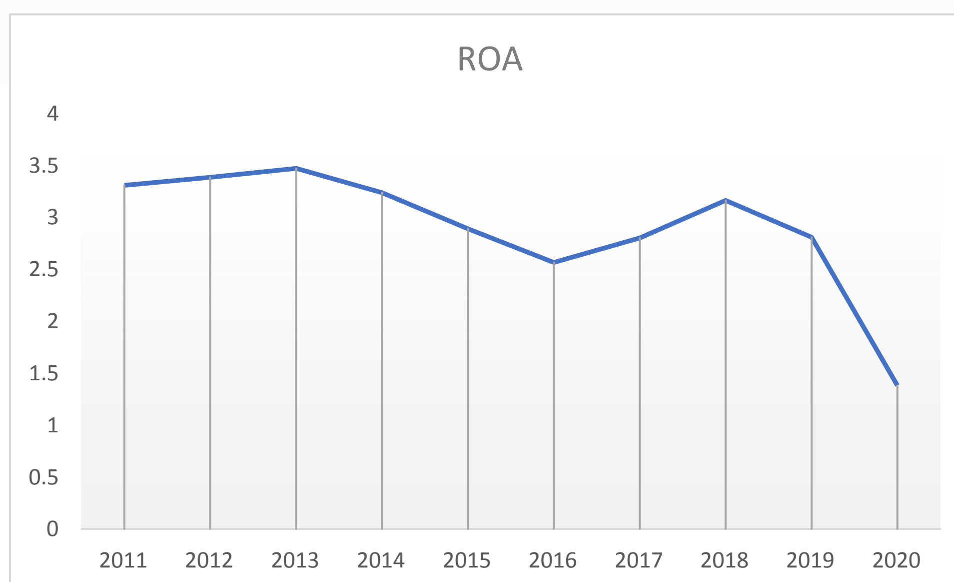


Figure 1.1

In the graph above, we can see how the ROA performance of state-owned banks in Indonesia has decreased significantly. The decline began to occur from 2013 to 2016. Although in 2017-2018 there was an increase, there was a very drastic decline in 2019-2020. Return on Assets is one of the most important financial ratios and has always been a concern for investors and other stakeholders. This ratio can explain how the company manages its assets so that it can generate maximum profit. This decreasing phenomenon does not only occur in ROA. In the chart below, we can also see how the Return on Equity (ROE) has decreased drastically, as experienced in ROA. This decline even occurred consistently and only experienced a slight increase in 2018. In general, the decline occurred significantly from 2011 to 2020.

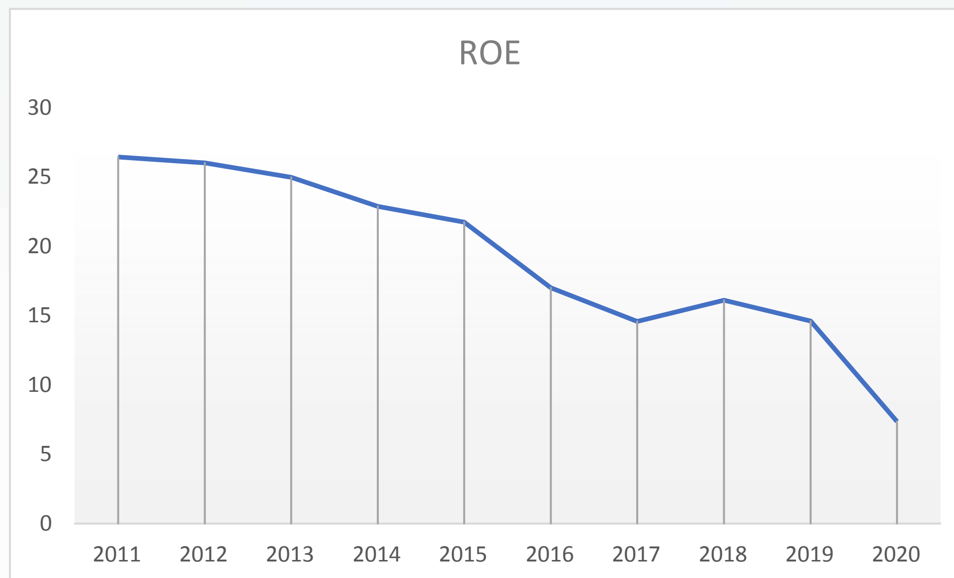


Figure 1.2

This phenomenon that exists in state-owned banks in Indonesia is a concern for researchers to be able to study in depth. Therefore, the researcher conducted a study entitled "The Effect of Capital, Asset Quality and Liquidity on Banking Profitability in Indonesia: A Case Study of Indonesian State-Owned Banks".

Literature Review

Banking Theory

Based on Article No. 7 of 1992 on Banking as amended by Article No. 10 of 1998 the definition of a bank is a business entity that gather money from the public in the form of deposits and channel them to the public in the form of loans and or other shapes in order to improve the living standards of Indonesian people. While the General Bank is a bank that can supply services in payment traffic. As it is known that the function of the bank in general:

a. Agent of Trust, the bank is an institution whose foundation is trust, both in raising funds and in distributing funds.

b. Agent of Development, Bank activities in the form of collecting and distributing funds are indispensable for the smooth running of the economy in the real sector. These bank activities enable the public to invest, distribute and consume goods and services, considering that these activities cannot be separated from the use of money.

c. Agent of Services, Banks are institutions that mobilize funds for economic development. Banks provide other banking services to the public. These services include, among others, money transfer services, safekeeping of securities, provision of bank guarantees, and settlement of bills.

Commercial bank business activities that can be carried out by commercial banks according to Law No. 7 of 1992 as amended by Law No. 10 of 1998 concerning Banking are as follows:

a. Collecting funds from the community.

b. Provide loans
c. Issue a debt acknowledgment letter
d. Buying, selling, or guaranteeing documents at risk as well as for the benefit of and at the behest of its customers.
e. Transferring money, both for their own interests and the interests of their customers, etc.

Profitability

According to Kasmir (2010:115), the profitability ratio is a ratio to examine the corporate's capability to create gains. Meanwhile, according to Brigham and Joel (2010:146), profitability ratios are a set of ratios that indicate a cluster of the impacts of liquidity, asset management and liability on operating profits. The factors that affect the profitability, among others:

Liquidity Ratio

The liquidity ratio provides the connection between the firm's cash and current assets and current liabilities. The greater the liquidity of the company, the stronger the overall financial condition of the company, and the greater the profitability of the company. Liquidity can be measured by current ratio, quick ratio, and cash ratio. The higher the Current Ratio (CR) indicates the more capable the company is in fulfilling its obligations that must be paid immediately. However, if it is too high, it will adversely affect the company's profitability, because some unproductive funds are invested in current assets, ultimately the company's profitability is not optimal.

Asset Management Ratio

A ratio that examine how potent a company manages its assets. Potential in asset management will have a positive impact on the profitability of a corporate. The asset management ratio can be measured by the inventory turnover ratio, the number of uncollected sales days, the fixed asset turnover ratio, the total asset turnover ratio and working capital turnover.

Debt Management Ratio

Debt management ratios are used to determine the extent to which companies use financing through debt (financial leverage). The use of debt in the company's investment spending can affect the firm's capability to create profits. The balance between funding through debt and own capital is known as the capital structure. Capital structure can be measured by Debt to Equity Ratio (DER), Debt to Asset Ratio (DAR), Debt Ratio, Times Interest Earned, and Long Term Debt to Equity.

Capital Adequacy Ratio

The Capital Adequacy Ratio is used to examine a bank's capability to cover up losses due to highly risk assets. CAR has a correlation with profitability because CAR is a ratio to measure bank capital capability to support its requirement (Ervani, 2010). The higher the CAR shows the bank's capability to create higher returns. So that CAR has a positive effect on profits and can raise ROA.

Non-Performing Loan

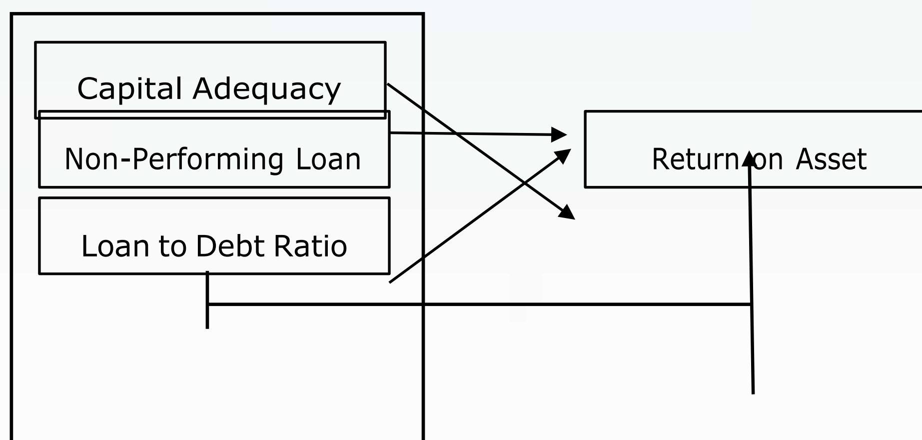
NPL is a financial ratio that depicts risk of credit. According to Siamat (2004) credit risk is a risk due to the default or incapability of the debtor to return the debt received from the creditor with the interest according to the terms predetermined or scheduled time period. The higher the NPL, the greater the risk of credit default being disbursed and potentially lowering net interest margin and lowering profits. If the profit generated reduced, it will reduce ROA (Manikam and Syafruddin, 2013). So based on this explanation, it shows that Non Performing Loans (NPL) have a negative effect on ROA.

Loan to Debt Ratio

LDR reflects the ratio between the financing provided by the bank to its customers compared to funds that enter or are collected from the public (Yatiningsih, 2015). Bank Indonesia has determined that a good LDR value is 80% - 100%. The size of the Loan to Debt Ratio of a bank will affect the bank's profitability. The higher the LDR owned by a bank, it also shows that the bank's ability to earn profits is getting better as well. So it can be said that LDR has a positive impact on ROA.

Research Framework

Figure 2.1 Research Framework



So, the hypotheses formed from the framework above are:
H1: There is a significant influence between CAR on ROA
H2: There is a significant influence between NPL on ROA
H3: There is a significant influence between LDR on ROA
H4: There is a significant influence between CAR, NPL and LDR on ROA

Research Methodology

Research Variable

The dependent variable in this research is the element of profitability as calculated by Return on Assets (ROA). While the variables that are suspected to be the cause of the independent variables in this research are: Capital Adequacy Ratio (CAR), Non-Performing Loans (NPL) and Loan to Deposit Ratio (LDR).

Return on Asset (ROA)

ROA is the ratio between profit before tax and total bank assets. According to Bank Indonesia, the calculation of ROA is as follows:

$$\mathrm{ROA} = \frac{\text{Net Income}}{\text{Average Total Assets}}$$

Capital Adequacy Ratio (CAR)

CAR is the risk of a bank's performance to measure the adequacy of capital owned by a bank to support assets that contain and generate risks, such as loans. The CAR ratio can be formulated as follows:

$$\mathrm{CAR} = \frac{\text{Bank Capital}}{\text{Risk Weighted Asset}}$$

Non-Performing Loan (NPL)

NPL is a ratio that proves the capability of bank to manage non-performing loans provided by banks to debtor. This ratio can be measured using the formula:

$$\text{NPL} = \frac{\text{Non Performing Loan}}{\text{Total Loan}}$$

Loan to Deposit Ratio (LDR)

LDR is a ratio used to examine the level of bank liquidity which shows the bank's capability to fulfil loans demand using the total assets owned by the bank. This ratio can be formulated as follows:

$$\text{LDR} = \frac{\text{Total Loans}}{\text{Total Deposits}}$$

Sample and Population

The population used in this study are banking companies listed on the Indonesia Stock Exchange (IDX) for the period 2011 to 2020. The sampling technique used in this study is the purposive sampling method. Purposive sampling method is a sampling technique based on certain considerations and criteria. Through purposive sampling, there were 4 state-owned banks that met the criteria to be the research sample.

Data Analysis Method

The analysis technique that will be used in this research is multiple linear regression analysis technique to obtain a comprehensive picture of the relationship between one variable and another. The dependent variable used is Return on Assets (ROA) and the independent variables are Capital Adequacy Ratio (CAR), Non Performing Loan (NPL) and Loan to Deposit Ratio (LDR). The regression equation is as follows:

$ROA = \alpha + \beta 1\ CAR + \beta 2\ NPL + \beta 3\ LDR + \varepsilon i$

Results and Discussion

Multiple linear regression is a statistical method used to test the effect of two or more independent variables on the dependent variable with interval or ratio measurement scales in linear equations. Based on the calculation of the regression equation between CAR (X1), NPL (X2) and LDR (X3) on ROA (Y) using Eviews 10, the following results are obtained:

Variabel	Coefficient	Std. Error	t-Statistic	Prob.
C	8.761458	1.011905	8.8658377	0.00000
CAR	-0.046519	0.043218	-1.076387	0.2889
NPL	-0.793555	0.135163	-5.871078	0.0000
LDR	-0.032914	0.007778	-4.231539	0.0002
RSquared	0.590184			
P-Value (F-Statistic)	0.000000			

Table 4.1

From the results of the panel data regression analysis, the regression equation obtained is as follows:

$Y = 8.761458 - 0.046519X1 - 0.793555X2 - 0.032914X3$

Hypothesis testing is carried out to determine the effect of X on Y:

The effect of CAR on ROA

From the results of the regression analysis done by the analysis software, it was determined that the P-value of CAR was 0.2889, which was higher than the α value (5%). This means that Capital

Adequacy Ratio (CAR) does not have a significant effect on Return on Asset (ROA).

The effect of NPL on ROA

From the results of the regression analysis done by the analysis software, it was determined that the P-value of NPL was 0.0000, which was lower than the ɑ value (5%). This means that Non-Performing Loan (NPL) has a significant impact on Return on Asset (ROA).

The effect of LDR on ROA

From the results of the regression analysis done by the analysis software, it was determined that the P-value of LDR was 0.0002, which was lower than the ɑ value (5%). This means that Loan to Debt Ratio (LDR) has a significant impact on Return on Asset (ROA).

The Effect of CAR, NPL and LDR on ROA

From the results of the regression analysis done by the analysis software, it was determined that the P-value of F-Statistic was 0.0000, which was lower than the ɑ value (5%). This means that CAR, NPL and LDR are simultaneously significant impact on Return on Asset (ROA).

Conclusion

According to the results of study that has been carried out as well as in the discussion of previous chapter regarding the testing of the Capital Adequacy Ratio (CAR), Non-Performing Loan (NPL), and Loan to Debt Ratio towards Return on Asset in state-owned banking sector for the 2011-2020 period, the researchers can draw the following conclusions:

1) Capital Adequacy Ratio (CAR) does not have a significant impact toward the dependent variable which is Return on Asset. These results are similar with other studies conducted by Agustiningrum (2013) Ramdany (2012), Kartini (2012) where CAR also does not have a significant impact on ROA. One of the explanations why CAR does not have a significant effect on this research is because basically banks have complied with the rules from Bank Indonesia regarding the minimum CAR that must be obeyed by banks.
2) Non-Performing Loan (NPL) has a significant and negative impact on Return on Assets (ROA). This is consistent with theoretical studies that have revealed that NPL has a negative impact on profitability. If the NPL is lower, it indicates that the risk level of lending to banks is low enough so that banks will experience profits (Rahim and Irpa, 2008).
3) Loan to Deposit Ratio (LDR) has a significant and negative impact on Return on Assets (ROA). This result is not in line with the theoretical study of LDR where LDR should have a positive impact on ROA.

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