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Determining Factors of Bank Mandiri's Return on Equity (ROE) Period 2009 to 2022

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KEYWORDS:
ROA, LDR, NPL, BOPO, CAR and Bank ROE.

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ABSTRACT

Banking management needs to maintain profitability, in order to survive and win the competition. The aim of the research is to look at the determining factors that influence changes in Bank Mandiri's ROE for the period 2009 to 2022.

The research method uses the t test, F test and multiple linear regression analysis and coefficient of determination with SPSS software version 26. The research period is 14 years from 2009 to 2022.
The results show that the ROA, LDR and NPL variables have a significant effect, while the BOPO and CAR variables have no effect and simultaneously and simultaneously have a significant effect on ROE.

INTRODUCTION

National development, including economic development, in the economic development process requires the participation of financial institutions. The existence of financial institutions in financing development is very necessary, because financial institutions are involved in financing economic development, such as banks and other financial institutions.

Banks are financial institutions that have an important role in the economy, because they are financial intermediary institutions. Almost the majority of economic activities, especially in the real sector, are driven by banking, so banks must have good and transparent performance.

Therefore, many parties have an interest in banking financial reports, including: the general public is a guarantee for money deposited in the bank or customers, by looking at the numbers in the financial reports. For company owners or shareholders, financial reports are to see the company's progress in creating profits and developing the bank's business. For the government, to determine the progress and compliance of banks in implementing monetary policy, developing industrial sectors and tax obligations.

The main goal of management is to achieve maximum profitability. Profitability is the bank's ability to generate or obtain profits effectively and efficiently. The profitability of a banking company shows the income that the company is able to generate in one or every period. The high profitability of a bank can indicate that most of the bank's performance can be said to be good, because it is assumed that the bank has operated effectively and efficiently and allows the bank to expand its business.

To increase a company's profitability, there are many factors that need to be considered, where in this paper the focus is on credit risk, CAR, BOPO and LDR. Credit activities are the backbone of the bank's main activities. Credit is a source of income and profits for banks, besides that credit is also a type of fund investment activity which is often the main cause of a bank facing major problems, namely the existence of a situation where the customer is unable to pay part or all of his obligations to the bank as agreed so that credit This is problematic and this is a credit risk.

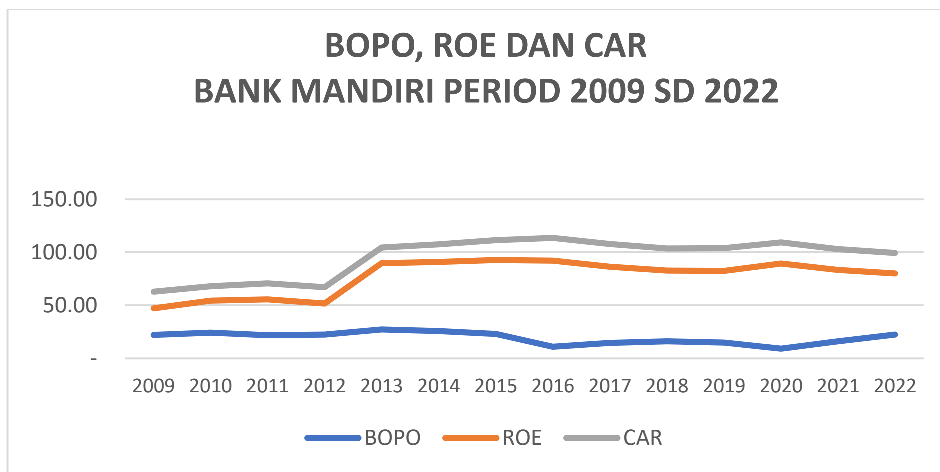
Then another variable that influences profitability is CAR (Capital Adequacy Ratio) which is a ratio that shows how far all bank assets that contain risk (participation credit, securities, claims on other banks) are financed from its own capital funds. Apart from obtaining funds from outside sources, such as public funds, loans (debt) and so on. (Kasmir, 2014) CAR is a ratio that measures the adequacy of a bank's capital. The higher the CAR achieved by a bank, the better the bank's performance, so that bank profits increase.

Apart from CAR, BOPO affects profitability, this is because BOPO shows bank efficiency, namely Operating Costs, Operating Income (BOPO). This ratio is calculated by comparing operational costs with operating income. Meanwhile, another

variable that influences profitability is LDR. LDR is an indicator for assessing financial performance to measure the level of liquidity, also known as the ratio of credit to total third party funds or commonly used to measure third party funds distributed in the form of credit.

The greater the distribution of funds in the form of credit compared to deposits or public savings at a bank, the consequence is that the greater the risk that must be borne by the bank concerned. LDR shows the amount of credit provided which is financed with third party funds. The LDR ratio is also used to measure the level of a bank's ability to pay third party funds from the return of credit provided.

Banks will get additional income from interest charged to depositors (assuming there are no bad loans). The additional interest will then increase the profits earned. Referring to the background above, the formulation of the problem in this paper is first, does credit risk affect Return on Equity in how many banking companies are listed on the Indonesian Stock Exchange. Second, does CAR have an effect on Return on Equity? Third, does BOPO have an effect on Return on Equity in several banking companies listed on the Indonesian Stock Exchange. And fourth, does LDR affect Return on Equity in several banking companies listed on the Indonesian Stock Exchange.



The table above shows that Bank Mandiri's BOPO, ROE and CAR for the period 2009 to 2022 experienced quite significant fluctuations and different movements, so it is necessary to study and analyze whether ROE is influenced by changes in BOPO and CAR during the research period and other variables such as ; NPLs. LDR and ROA.

The results of research from several researchers provide different results between one researcher and another regarding the factors that influence ROE. Analysis of the influence of credit risk, CAR, BOPO and LDR on ROE has been carried out by (Sudiyatno & Fatmawati, 2013), an empirical study on banks listed on the Indonesian Stock Exchange. The results of the analysis show that financial ratios, consisting of the CAR and LDR ratios, have a positive but not significant effect on ROE. Meanwhile, BOPO has a negative and significant effect on ROE. The predictive ability of these three variables on ROE is 18.8% as shown by the adjusted R square of 0.188.

The research results of Manuwati, (2013), confirmed that CAR had a significant effect on ROE, and NPM had no significant effect on ROE, ROA had a significant effect on ROE and LDR had a significant effect on ROE. Then, research by Nursatyani, (2011), t test results show that operating efficiency (BOPO) and credit risk (NPL) have a negative and significant effect on financial performance (ROE). Market risk (NIM) and capital (CAR) have a positive and significant effect on the financial performance of domestic banks and foreign banks. Based on the results of the Chow Test, it was concluded that there are differences in the influence of operating efficiency (BOPO), credit risk (NPL), market risk (NIM), and capital (CAR) on financial performance, between domestic banks and foreign banks.

Meanwhile, Permatasari, (2012), with the findings of data analysis on Loan to Deposit Ratio (LDR), Non-Performing Loans (NPL), and Minimum Statutory Reserves (GWM) had no effect on ROE. The CAR, BOPO and Institutional Ownership variables have a significant and positive effect on Return On Equity (ROE), while NIM has a positive and significant effect on Return On Equity (ROE). The predictive ability of these seven factors on ROE is 64.8%, while the remaining 35.2% is influenced by other actors that are not included in the research model.

Research conducted by Monica, (2019), with the title Analysis of the Effect of CAR, NPL, NIM, BOPO and LDR on ROE in Foreign Exchange National Private Commercial Banks in Indonesia, the results of the research state that the CAR, NIM and LDR variables have no effect on ROE, the NPL variable and BOPO, have a negative effect on ROE, and jointly testing the CAR, NPL, NIM, BOPO and LDR variables have an effect on the ROE of banking companies registered with Bank Indonesia.

Research by Burn & Grove, (2009) and Notoatmodjo, (2010), there is an influence between CAR (Capital Adequacy Ratio), NPL (Non Performing Loan), BOPO (Operating Costs to Operational Income) and LDR (Loan to Deposit Ratio) on ROE (Return

On Equity) at PT Bank SulutGo and together there is an influence between CAR (X1), NPL (X2), NIM (X3), BOPO (X4), and LDR (X5) on ROE at PT Bank SulutGo.

Research results by Baasi (2018) explain that NPL has a negative effect on ROE, CAR has a positive effect on ROE. Research by Alper & Anbar (2011) explains that the results of this research are that CAR has no effect on ROE, asset quality has no effect on ROE, liquidity has no effect on ROE, deposits have no effect on ROE.

Research conducted by Bilal, Saeed, Ali, & Toquer (2013) explains that NPL has a negative effect on ROE and research conducted by Damayanti & Savitri (2011) explains that LDR has no effect on ROE, CAR has a significant effect on ROE.

Research conducted by Putro (2017) explains that LDR has an effect on ROE and NPL and BOPO have no effect on ROE. Research conducted by Hermina & Suprianto (2014) explains that LDR, NPL and CAR have no effect on ROE.

Santoso's research (2016) explains that LDR has an insignificant positive effect on ROE, NPL has an insignificant negative effect on ROE, CAR has a negative effect on ROE and BOPO has a positive effect on ROE. Research conducted by Maroni & Simamora (2020) explains that NPL, LDR and BOPO have a significant negative effect on ROE. Research conducted by Vellanita, Arimbawa & Damayanti (2018), explains that NPL, CAR and LDR have a negative effect on ROE.

Research conducted by Erna Wati, (2011), the results of the study stated that BOPO and NPL had a negative and significant effect on ROE, LDR had a positive and significant effect on ROE in publicly traded banks. Based on several statements above and the results of previous research, the aim of this research is to see what factors can influence Bank Mandiri's ROE for the period 2009 to 2022 in Indonesia.

THEORITICAL REVIEW

Understanding Financial Reports

According to Rodoni & Ali, (2014), financial reports are reports that describe the financial position or condition of a company. This report consists of assets or wealth, liabilities or obligations and equity or capital. Assets are the wealth owned by a company, liabilities are the company's obligations to other parties, while equity is the owner's or stockholder's ownership of the company which consists of capital and retained earnings.

Furthermore (Hery, 2012) defines that financial reports are basically the result of the accounting process which can be used as a tool to communicate financial data or company activities to interested parties. Syahrial and Purba, (2011), said that : "Financial statements (financial statement analysis) is the application of analytical tools and techniques for general purpose financial reports and related data to produce estimates and conclusions that are useful in business analysis.".

Furthermore, in a simple sense, financial reports are stated by (Fahmi, 2012), namely that financial reports are information that describes the financial condition of a company, and furthermore this information can be used as a description of the company's financial performance. After the financial reports are prepared based on relevant data, and carried out using correct accounting and assessment procedures, the company's true financial condition will be seen (Kasmir, 2012). The financial condition referred to is the capital (equity) in the balance sheet owned. Then, you will also know the amount of income received and the total costs incurred during a certain period.

Financial Ratios

In business and economics, the definition of ROE is a metric for comparing the amount of a company's net income and the total amount of investor/owner capital in it. Meanwhile, in the world of shares, the meaning of ROE is the amount of net business income per incoming investor funds.

The definition of Return On Equity (ROE), according to Brigham & Houston (2011) in Sartono (2012: 124), ROE is: Measuring the company's ability to obtain profits available to the company's shareholders. This ratio is also influenced by the size of the company's debt, if the proportion of debt is large then this ratio will be large.

Return on equity is a ratio to measure net profit after tax with own capital Kasmir (2015:204). This ratio shows the power to generate returns on investment based on the book value of shareholders. The higher this ratio, the better, meaning the position of the company owner is stronger. The most important ratio is return on equity, which is the net profit for shareholders divided by total shareholder equity.

Capital Adequacy Ratio (CAR) is a capital adequacy ratio that functions to accommodate the risk of loss that may be faced by the bank. The higher the CAR, the better the bank's ability to bear the risk of any risky credit/productive assets.

According to Dendawijaya (2009:121), CAR is a ratio that shows how much of all bank assets contain an element of risk (credit, investments, securities, claims on other banks) which are financed from the bank's own capital, in addition to obtaining funds from sources outside the bank.

Operational Efficiency Ratio (BOPO), as stated by Dahlan Siamat (2001:153), states that the meaning of the ratio of Operational Costs to Operational Income (BOPO) is: "The efficiency ratio is used to measure the ability of bank management to control operational costs towards operational income." Operational costs are costs incurred by the bank in order to carry out its main business activities (such as interest costs, labor costs, marketing costs). Taswan (2010:167), the Ratio of Operational Costs to

Operational Income (BOPO) identifies bank operational efficiency. The higher this ratio indicates the more inefficient the bank's operational costs are.

Non Performing Loans (NPL), according to Wisnu Mawardi (2005:25) Loan to Deposit Ratio can be interpreted as follows: "The ratio of the possibility of depositors or debtors withdrawing their funds from the bank". According to Dendawijaya (2009:49) the meaning of Loan to Deposit Ratio (LDR) is as follows: "The comparison between the entire amount of credit provided by the bank and the funds received by the bank". Non-Performance Loans (NPL), are calculated by dividing non-performing loans by total credit, and can be formulated as follows: NPL = (Non-performing credits/Number of credits) X 100%.

According to Greuning & Bratanovic, (2011), credit risk refers to the risk of negligence, but this risk is also related to liquidity, because the market for credit that has a low rating is generally leaner than credit that has a higher rating, and the liquidity of assets with credit those with lower scores will be in significant need during a systemic crisis.

The most unsatisfying development in credit provision for banks is if the credit they provide turns out to be problem credit (Dendawijaya, 2009). Furthermore (Dendawijaya, 2009) states that there are several categories of credit collectibility based on provisions made by banks, namely; current credit, credit with special attention, substandard credit, doubtful credit, and bad credit.

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Loan to Deposit Ratio (LDR), is a financial ratio that measures the level of banking health based on the number of loans given by the bank to the public compared to the amount deposited by the public and the bank's own capital. This ratio is expressed as a percentage. Providing loans in large amounts or high LDR is expected to cover the cost of discovery and provide profits to the bank from loan interest. If a bank has an LDR level above the maximum amount determined by the government, it can be concluded that the bank's soundness level based on the LDR calculation is not good because it provides too many loans (Kasmir, 2012: 225).

RESEARCH METHODS

Statistical analysis was carried out using prerequisite analysis tests (normality test and linearity test), multiple linear regression analysis, classical assumption tests (normalization, multicollinearity, heteroscedasticity, autocorrelation) and hypothesis tests (t test, F test, and coefficient of determination).

The approach used in determining the population and sample in this research is purposive sampling based on certain criteria, namely; (1) Bank Mandiri Company during 2009 to 2022; (2) Publication of financial reports regularly and making a profit every year; (3) Financial reports that have been audited until December 2009 to 2022.

The types of data used in this paper are qualitative data and quantitative data, while the data sources are primary data and secondary data. The data collection techniques used in this research are observation and documentation. Observation is research carried out directly, where the author goes directly to the company to obtain the necessary data. Documentation is the collection of data that can be used as research material originating from archives owned by banking companies which are considered capable of providing significant data regarding the problem to be researched.

Data Collection Method, based on the variables that have been stated, there are several stages of data collection in this research. These stages are: (1). Literature study data is collected to support published data, literature and other research results to obtain a general picture related to the field being researched. (2). Secondary Data Collection. Secondary Data is obtained from published Annual Financial Reports as well as obtained through documentation held by various sources and selected according to the research conducted.

Secondary data is data collected by researchers from available sources so that researchers can be called second hand (Mulyadi, 2016: 144). According to Lofland (in Moleong, 2013: 157) "The main data sources in qualitative research are words and actions, the rest are additional sources such as documents and so on".

Multiple linear regression analysis is an analysis to determine the effect of ROA, BOPO, LDR, CAR and NPL on ROE at Bank Mandiri.

$$Y = a + bX_1 + bX_2 + bX_3 + bX_4 + bX_5 + e$$

Information:

Y = Return on Equity (ROE)

X_1 = ROA (Return on Asset)

X_2 = BOPO (Operational Costs to Operational Income)

X_3 = LDR (Loan to Deposit Ratio)

X_4 = CAR (Capital Adequasi Ratio)

X_5 = NPL (Non Performance Loan)

a = Konstanta

RESULTS AND DISCUSSION

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.991[a]	.982	.970	.96990

a. Predictors: (Constant), NPL, LDR, BOPO, ROA, CAR

The results of the Coefficient of Determination test show that the R Square is 0.982 or 98.2 and the Adjusted R Square is 0.970 or 97.0, which means that the influence of the ROA, BOPO, LDR, CAR and NPL variables on Bank Mandiri's ROE is very strong.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	400.690	5	80.138	85.189	.000[b]
	Residual	7.526	8	.941		
	Total	408.216	13			

a. Dependent Variable: ROE

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

The results of the Anova test or simultaneous test, between the variables ROA, BOPO, LDR, CAR and NPL on ROE are 85.189, greater than the F table of 3.633 and the Sig is 0.000, smaller than 0.050, so it can be concluded that the simultaneous influence between the variables independent of the dependent variable has a significant influence

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	27.435	6.022		4.556	.002
	ROA	5.001	1.053	.550	4.751	.001
	BOPO	.056	.031	.195	1.830	.105
	LDR	-.152	.040	-.272	-3.756	.006
	CAR	-.429	.254	-.220	-1.691	.129
	NPL	-2.763	.960	-.344	-2.879	.021

a. Dependent Variable: ROE

Partial test results between the independent variable and the dependent variable, the ROA, LDR and NPL variables have a significant effect on ROE (sig, 0.05), while the BOPO and CAR variables do not have a significant effect (sig > 0.05).

CONCLUSION

ROA greatly influences ROE, while LDR and NPL are the opposite, if LDR and NPL increase, ROE will decrease. The ROA, LDR and NPL variables have a significant effect, while the BOPO and CAR variables do not have a significant effect and simultaneously have a significant effect on Bank Mandiri's ROE for the period 2009 to 2022.

RECOMMENDATION

Management needs to pay attention to the size of the NPL, because banks with large assets must manage their assets well by continuing to maintain the size of the NPL, because if bad credit occurs, the company can experience losses, because the company does not get interest income and must form reserves for any decrease in credit collectibility that occurs. Distributed.

Non-Performing Loans (NPL) is a factor that influences Return On Equity (ROE), the higher the NPL, the lower the ROE will be and management must reduce NPL or non-performing loans by collecting or auctioning collateral.

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