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Performance Measurement of State-Owned Enterprise (BUMN) Bank in Surabaya (Case Study in People's Bank of Indonesia/State-Controlled Bank (Bank BRI)

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Abstract

This study aims to examine the effect of Capital Adequacy Ratio (CAR), Non-Performing Loan (NPL), Loan to Deposit Ratio (LDR), and Operating Costs on Operating Income (BOPO) on the profitability of Commercial Banks. The population used in this study is Bank BRI in 2009-2018. The data in the study were obtained from the financial statements in 2009-2018. The analytical method used is multiple linear analysis with the classic assumption test which includes autocorrelation test, multicollinearity test, and heteroscedasticity test using SPSS version 25.0 for windows. The results showed that the variables CAR, NPL, LDR, and OEOI affect the profitability of Bank BRI. The objective of this research is to identify the effect of capital adequacy ratio (CAR), non-performing loan (NPL), loan to deposit ratio (LDR), and operational costs for operating income (BOPO) on commercial bank profitability. People's Bank of Indonesia/State-Controlled Bank (Bank BRI) was utilized as the population for this study from 2009 to 2018. Financial statements from 2009 to 2018 were used to collect data for the study. Multiple linear analysis with classical assumption tests was utilized to conduct the analysis, which included autocorrelation, multicollinearity, and heterocedasticity tests. SPSS version 25.0 for Windows was used to assist with the analysis. The findings indicated that CAR, NPL, LDR, and BOPO all had an effect on the profitability of a People's Bank of Indonesia/State-Controlled Bank (Bank BRI).

Keywords
ROA; capital adequacy ratio CAR; non performing loan NPL; OEOI, bank performance

I. Introduction

Banks serve an important function as an economic organization that tries to improve the community's welfare. As stated in Article 4 of Law No. 10 of 2008, Indonesian banks strive to serve national development by enhancing equity, economic progress, and national stability, so increasing the welfare of many people.

According to the law, the Bank serves as an intermediary entity with the primary function of raising funds from the community, distributing funds to the public, and providing other financial services (Majidi, 2020). Thus, it may be inferred that the bank serves as a mediator between people with funds and those in need of funds.

The bank's job as the economic heart requires unquestionably the community's trust. As a result, the bank's performance becomes a critical factor to examine in order to sustain the community's trust. The scale of the bank's performance can be viewed and quantified by studying and calculating the ratios in the bank's financial statements.

Financial statement information is required to ascertain the bank's financial development. Bank management that is capable of successfully managing banks will generate

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earnings and accomplishments. Additionally, the Financial Lapora Bank manager can compare the results of previous and present financial development.

The owner of the funds to the party in need of funds is critical, as is a strong bank performance. Adyani (2011) defines bank financial performance as a depiction of a bank's financial conditions over a specified time period in terms of either funding or distribution of funds. Profitability is one measure that can be used to assess a bank's financial performance.

To find out good bank performance, an assessment of the condition of the bank, the analysis used to determine the condition of the bank is CAMEL. This analysis consists of Capital Aspects, Assets Quality, Management, Earns, Liquidity and Sensitivity. The results of each of these aspects produce a condition of a bank.

According to CAMEL analysis, there is a capital component, which includes the Capital Adequacy Ratio (CAR), which is used as a measure of a bank's solvency status. The automobile displays the figures, and if they go below a bank's minimum provision, the bank's condition is deemed to jeopardize the customer's money's safety. This demonstrates that the bank operates entirely on community funds. 197 (Cashmen, 2014).

The CAMEL's next component is Non-Performing Loan (NPL). NPL, or bad credit, are critical components for determining a bank's health. Banks with high credit levels indicate that there are management issues. With a high level of zero, profit will be reduced as a result of the formation of PPAP (Retnadi, 2006).

In carrying out its duties as an intermediary institution, the Bank must have the ability of liquidity so that the general public can assess the success of the bank in its duties, high levels of liquidity will increase public trust to see the level of liquidity using the loan to deposit ratio (LDR).

As an indicator, ROA (Return on Asset) is used to determine the magnitude of a bank's performance. Return on assets is critical since it is a profitability measure that indicates the benefits achieved by the bank. When a bank's ROA increases, it demonstrates that the bank's performance is improving (Suad Husnan, 1998. Kasbal, 2012).

Along with camel analysis, this study will use additional variables, including variable BOPO. The researchers utilized the variable BOPO because, according to Vernanda, 2016: 12, the analysis revealed that BOPO had a positive and substantial effect on ROA. Additionally, Haryanto's 2014: 19 research demonstrates that the results are inversely proportionate, indicating that BOPO has a negative and significant effect on ROA.

The researchers conducted research on the identify the effect of CAR, NPL, LDR, and BOPO on profitability at People's Bank of Indonesia/State-Controlled Bank (Bank BRI) based on the background description. This research is expected to positively influence banking stakeholders in enhancing their institutions' performance.

II. Review of Literatures

2.1 Return on Assets (ROA)

The aim of this study is to identify bank performance using the ROA ratio, which is a measure of profitability. This profitability ratio can be used to determine a company's ability to generate profits from the assets it uses. ROA's capacity to gauge bank performance is based on the ability to see a bank's profit in the past in order to forecast it for the future. The assets in this case are those acquired by businesses either through their own capital or through foreign capital, and the accumulation of these assets is then calculated into the assets of the business.

2.2 Capital Adequacy Ratio (CAR)

Banks have several assets that contain risks such as credit, participation of securities, and bills in other banks therefore Bank Indonesia regulates the availability of the minimum capital owned by the Bank of 8% stated in Bank Indonesia Regulation Number 10/15/PBI/2008 Article 2 Paragraph 1. The bank must provide a total capital of a particular percentage of the number of plantings. Therefore, the bank is a business segment whose activities are largely regulated by the government (Siamat in Tarigan, 2020). Bank can simply be interpreted as "financial institutions whose main activity is to collect funds from the public and channel them back to the community and provide other bank services (Kasmir in Rosmika, 2019). This shows that the role of banks is very important for a country's economy in terms of supporting development (Pradata, 2020).

2.3 Non-Performing Loan (NPL)

NPLs, often referred to as signs of problematic loans, are a key indicator of the soundness of a bank's assets. NPLs dictate the amount of credit available to banks. When NPLs reach a critical level, the bank suffers from bad credit. The occurrence of bad credit demonstrates that bank management has not optimized asset management. Thus, NPLs serve as a barometer of a bank's health. The indicator is a fundamental financial measure that can be used to assess capital structure, profitability, credit risk, market risk, and liquidation.

2.4 Loan to Deposit Ratio (LDR)

The LDR, or Loan to Deposit Ratio, is a measure of time deposits, demand deposits, and savings. This ratio is used to determine the amount of liquidity available to meet customer loan packages. When a bank lends all of its funds, the ratio would be high, but a low ratio indicates that the bank has cash available for loaning. (7) (Munawar, 2018).

2.5 Operational Costs for Operating Income (BOPO)

While the bank incurs operational costs in carrying out bank management, the ratio of operational costs to operating income is necessary to assess the bank's health. This ratio is used to assess a bank's management capability in managing the bank (Harun, 2016: 11). Bank success may be quantified quantitatively by examining the ratio of operational expenditures to operating income (Firdausi, 2014: 17).

III. Research Methods

3.1 Operational Definition

The variable in this study is the performance of a company that is reduced by Return on Asset (ROA) as a dependent variable. While the independent variable is the Capital Adequacy Ratio (CAR), Non-Performing Loan (NPL), Loan to Deposit Ratio (LDR), Operational Costs of Operating Income (BOPO). Each variable can be explained as follows:

1. Capital Adequacy Ratio (CAR)
   CAR is a Capital Adequacy Ratio that serves to account for the risk of loss that the bank is expected to incur. If the car's value is high, the bank can fund operational expenses and contribute significantly to profitability. The CAR Ratio is expressed as a percentage (%).
2. Non-Performing Loan (NPL)
   NPL, or non-performing loan, is a critical indicator of a bank's success. The ratio of NPL is stated in percentage units (%).
3. Loan to Deposit Ratio (LDR)

The LDR ratio measures a bank's ability to meet short-term obligations (often referred to as liquidity) by dividing total credit by total third-party funds (DPK). A percentage unit is used to express the LDR ratio (%).

4. Operating Costs for Operating income (BOPO)
   BOPO is often called the ratio of efficiency is used to measure the ability of bank management in controlling operational costs on operating income. The BOPO ratio is stated with a percentage unit (%).

3.2 Quantitative Analysis Method

The model used is multiple regression analysis model with the following models:

$$ROA = \alpha + \beta 1CAR + \beta 2NPL + \beta 3LDR + \beta 4BOPO + \varepsilon$$

Description:
Y = ROA
α = Constant
$\beta 1 - \beta 4$ = Free variable regression coefficient
X1= CAR
X2 = NPL
X3 = LDR
X4 = BOPO
ε = error

3.3 Hypothesis Test

a. Classic Assumption Test

To conduct a regression analysis using SPSS, certain assumptions must be validated first. Because this study makes use of time series data, namely People's Bank of Indonesia/State-Controlled Bank (Bank BRI)'s performance data from 2009 to 2019, the normality test, autocorrelation test and multicolinity test must be performed.

b. Determination Coefficient

The coefficient of determination (R2) is used to determine the best level in regression analysis, which it can be seen from the amount of determination coefficient (R2) between 0 (zero) and 1 (one). The coefficient of determination (R2) zero, means that the independent variable has absolutely no effect on the dependent variable. If the coefficient of determination is close to one, it can be said that the independent variable affects the dependent variable, in addition, the coefficient of determination (R2) is used to determine the percentage of changes in non-free variables (Y) which is generated due to independent variables (X).

c. F Test

The F test is known as a simultaneous test / example test (ANOVA test), which is a test to see how the effects of all the free variables simultaneously on the dependent variable or to test whether the regression example is designed either / significantly or not good / non significant.

Table 1. F Test (Simultaneous Test)

Model	Df	Mean Square	F_{count}	F_{table}
Regression	4	0,790	64,132	5,19
Residual	5	0,012		

d. T Test

This test is used to know the significance level of the impact of each independent variable on the dependent variable using the estimate of other independent variables unchanged (ceteris paribus).

IV. Results and Discussion

4.1 Results

a. Multiple Linear Regression

Double regression analysis is used in estimating how the situation (up and down) dependent variable (Y), if 2 / more independent variable (X) becomes a predictor factor manipulated its value. In accordance with the results of the analysis at People's Bank of Indonesia/State-Controlled Bank (Bank BRI), then the equation of the multiple linear regression analysis becomes the following:

$$Y = 12{,}166 - 0{,}118X_1 - 0{,}832X_2 - 0{,}032X_3 - 0{,}018X_4$$

The magnitude of the CAR, NPL, LDR and BOPO coefficients has a negative direction, distributing the existence of a negative correlation between CAR, NPL, LDR and BOPO using ROA. If the car, LDR, NPL, and BOPO are higher or up, then ROA will decrease / down.

b. Hypothesis Testing and Data Analysis

In accordance with the results of the analysis at People's Bank of Indonesia/State-Controlled Bank (Bank BRI). Holistic the independent variable of the Capital Adequacy Ratio (CAR) (X1), Non-Performing Loan (NPL) (X2), Loan to Deposit Ratio (LDR) (X3), as well as operational costs for operating income (BOPO) (X4) at People's Bank of Indonesia/State-Controlled Bank (Bank BRI) has a simultaneous and concrete effect on profitability (ROA) (Y) at People's Bank of Indonesia/State-Controlled Bank (Bank BRI).

c. T Test

Partial hypothesis test or T test can show how far the effect of one independent variable is the Capital Adequacy Ratio (CAR) as X1, Non-Performing Loan (NPL) as X2, Loan to Deposit Ratio (LDR) as X3, as well as operational costs for operating income (BOPO) as X4 individually with the conservation of bound variables namely profitability (Return on Assets / ROA) (Y). Here are the results of the analysis:

Table 3. Results of t Test for The Profitability of People's Bank of Indonesia/State-Controlled Bank (Bank BRI) Using t Significant Value

Variable	T_{count}	T_{table}
Capital Adequacy Ratio (CAR) (X_1)	-5,711	2,57058
Non-Performing Loan (NPL) (X_2)	-4,240	2,57058
Loan to Deposit Ratio (LDR) (X_3)	-2,591	2,57058
Operational costs for operating income (BOPO) (X_4)	-1,006	2,57058

Source: processed data (researchers)

The results of the analysis in this study showed a negative variable of the Capital Adequacy Ratio (CAR) and had a significant influence on People's Bank of Indonesia/State-Controlled Bank (Bank BRI) profitability (ROA). This was shown from the amount of the value of thitung car as much as (-5,711)> t_{table} as much as (2.57058). In this study Car was declared significantly influenced on People's Bank of Indonesia/State-Controlled Bank (Bank BRI) profitability (ROA).

The results of the analysis in this study showed non-performing loan (NPL) variables were negative and had significant influence on People's Bank of Indonesia/State-Controlled Bank (Bank BRI) profitability (ROA). This is indicated by the amount of the value of the NPL nPL as (-4,240)> t_{table} as much (two, 57058). In this study NPL was declared significantly influence on People's Bank of Indonesia/State-Controlled Bank (Bank BRI) profitability (ROA).

The results of the analysis in this study showed that the Loan to Deposit Ratio (LDR) variables were negative and had a significant effect on Bank BRI profitability (ROA). This is indicated by the amount of LDR thitung value as much as (-2,591)> t_{table} as much (two, 57058). In this study LDR was declared significantly influence on the profitability (ROA) of People's Bank of Indonesia/State-Controlled Bank (Bank BRI).

The results of the analysis in this study showed that operational cost variables on operating income (BOPO) were negative and did not significantly influence the People's Bank of Indonesia/State-Controlled Bank (Bank BRI) profitability (ROA). This was shown to use the amount of the value of thitung BOPO as much as (-1,006) $<t_{table}$ as much (2.57058). In this study BOPO was declared no significant influence on People's Bank of Indonesia/State-Controlled Bank (Bank BRI) profitability (ROA).

4.2 Discussion

According to the hypothesis test simultaneously / simultaneously (F test), it can be explained that holistic bank performance can be measured using the Capital Adequacy Ratio (CAR), Non Performing Loan (NPL), Loan to Deposit Ratio (LDR), and operational costs for income Operations (BOPO) at BUMN Bank Surabaya, meaning:

1. *Capital Adequacy Ratio* (CAR) has an effect on a bank's profitability. Because the car has a high value in People's Bank of Indonesia/State-Controlled Bank (Bank BRI), it has an effect on the bank's profits. The higher the car, the more capable the bank is of bearing the risk associated with each dangerous credit / asset risk. If the car's worth is high, it indicates that the bank can finance its activities, which helps the business and results in relatively substantial donations for profitability. According to Ramadhani's (2017) research, a high capital adequacy ratio (CAR) can increase banking profitability and prevent funds from becoming unemployed, as well as reduce operational costs and increase operating income by suppressing Porto promotions, minimizing problematic financing, improving investment management, and employee efficiency. According to Pinasti (2018), high cars might result in a decline in profitability because the bank is unable to allocate funds efficiently as a result of prover occur. A high car indicates that the bank is not doing all possible to build its business. If the automobile is a high bank and is balanced through maximum company expansion, it will raise the bank's revenue, which will boost the bank's profitability.
2. *Non-Performing Loan* (NPL) has an effect on the profitability of People's Bank of Indonesia/State-Controlled Bank (Bank BRI) since NPLs / non-performing loans at Bank BRI are considered healthy because they remain under the BI's decree of 5%. If the NPL increases, the bank might be considered unhealthy, as a high NPL can result in a reduction in the benefits that the bank will take. According to the findings of this study, which are consistent with Pratiwi and Weagustini (2015), the NPL is a proxy

used to analyze a banking company's credit risk by evaluating its management's ability to manage problem loans in order to generate clean interest income. Thus, the more effectively the bank manages distressed loans, the higher the profitability.

3. *Loan to Deposit Ratio* (LDR) has an effect on the profitability of People's Bank of Indonesia/State-Controlled Bank (Bank BRI) since the Primary Director of People's Bank of Indonesia/State-Controlled Bank (Bank BRI) stated that the Bank's liquidity would be maintained to maintain an LDR of at least 90%, so that the People's Bank of Indonesia/State-Controlled Bank (Bank BRI) could also increase the growth of third party funds (DPK). The findings of this study corroborated Prasajaya and Ramantha's (2013) finding that a high LDR indicates a bank's profitability. This demonstrates that banks are relatively efficient at channeling loans to third parties. The more credit that can be funneled, the more income the bank can accept as profitability improves.
4. People's Bank of Indonesia/State-Controlled Bank (Bank BRI)'s profitability is unaffected by operational costs for operating income (BOPO), since a higher banking BOPO ratio indicates that the bank is more efficient in carrying out its commercial activities. People's Bank of Indonesia/State-Controlled Bank (Bank BRI) is an example of a bank that excels at efficiency. Cost efficiency arises as a result of the company's capacity to maintain credit quality, which delays the formation of backup costs. While income growth continues, the drop in BOPO is due to People's Bank of Indonesia/State-Controlled Bank (Bank BRI)'s continued focus on boosting fee-based income donations from Corporate Customers and also from e-channel transactions. As a result, the findings of this study were consistent with those of Adityantoro, 2013: 6, which explain that as the bank's BOPO ratio increases, the profitability obtained decreases, implying that the bank's financial performance will decline and the BOPO shift must be at an efficient level to generate profitability. The apizzymes and performance will be increased.

V. Conclusion

This study indentified Bank BUMN's (ROA) performance in Surabaya from 2009 to 2019. Using performance metrics such as capital adequacy ratio (CAR), non-performing loan (NPL), loan to deposit ratio (LDR), and operational costs vs operating income to evaluate bank performance (BOPO). After conducting the above tests, it can be concluded that the three factors affecting the bank's performance (ROA) are the capital adequacy ratio (CAR), non-performing loans (NPL), and loan to deposit ratio (LDR), while costs operations for operating income (BOPO) have no effect on the bank's performance (ROA). Profitability (ROA) is unaffected by operational costs for operating income (BOPO), as the drop in BOPO is a result of the People's Bank of Indonesia/State-Controlled Bank (Bank BRI)'s continued expansion of microcredit and concentration on fee-based income donations sourced from corporate clients or through e-channel transactions.

According to the above reasons, management can improve the Bank's performance (ROA) by increasing operational efficiency, limiting credit risk, and anticipating market risk. Bank operational expenses must be minimized by resource optimization, credit risk must be mitigated through credit raw tightening, and market risk can be anticipated through spread optimization through the establishment of competitive lending rates. Indonesia's capital market is a developing market (emergency market), which means that the possibility to implement policy is quite wide.

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