

Analysis of Effect of Capital Adequacy Ratio, Loan to Deposit Ratio, Non Performing Loan, Bopo, and Size on Return on Assets in Rural Banks at Indonesia

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Abstract: The purpose of this research is: 1) To know and analyze Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), Non-Performing Loan (NPL), BOPO, and SIZE, partially and simultaneously to Return on Assets (ROA) at Conventional Rural Bank in Indonesia; 2) To know and analyze the influence of Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), Non-Performing Loan (NPL), BOPO, and SIZE, partially and simultaneously to Return on Assets (ROA) at Conventional Rural Bank in Indonesia. The population in this studies all credit banks in Indonesia period 2008-2016. This research is explanatory. The type of data is secondary data (publication of Central Financial Services Authority, Central Bank Indonesia, and other relevant publications), analytical tools using multiple regression. The results showed: 1). CAR tends to be higher in the healthy predicate, LDR is in the category of the healthy category, NPL is still in the predicate category, but the trend is getting worse, BOPO is still controlled and categorized as the healthy category, and Size shows growing trend positive; 2). partially CAR and NPL, negatively significant is not significant, LDR has a positive effect is not significant, while BOPO and size have a significant negative effect on Return on Asset; simultaneously tested that CAR, LDR, NPL, BOPO, and SIZE have a significant effect on Return on Assets.

Keywords: return on assets, loan to deposit ratio, non-performing loan, size, rural banks.

INTRODUCTION

Rural Banks in the national scale increasingly provide positive trends, especially in providing services to MSME customers, which are sometimes considered not bankable by commercial banks, including encouraging SMEs to be bankable, assisting, training and helping SMEs marketing. The main things that are key to the success of BPR in providing these services are the location of BPRs that are close to the needy community, simple service procedures and more prioritizing personnel approaches as well as the flexibility of loan models and models. So for business actors belonging to MSMEs or non-bankable for commercial banks is a solution to obtain business capital services that currently a number of SMEs more than 62 million units spread across Indonesia. BPRs have a strategic role in mobilizing the real sector and economic activities of the community through the intermediation function through the storage of public funds that surplus funds and channeling back to the community in need. With its strategic function, it is not surprising that the banking sector gets big attention from the government because banking is a business full of risks and failures that occur in the banking system

can give a bad impact to the economy as a whole (systemic risk).

Some of the achievements of BPR nationally that can be used as the main indicators are seen from the amount of loans granted for 2010 amounting to Rp 33.844.259.282 trillion, in 2011 amounting to Rp 41,099,515,666 trillion, in 2012 amounting to Rp 49,818,402,968 trillion, in 2013 per August Rp 57,634,001,007 trillion, then funding activities, the growth of public savings funds in the form of savings and deposits appear as follows, in 2011 amounting to Rp 38.209.426597 trillion, in 2012 amounting to Rp 44869.613.009 trillion, in 2013 of Rp. 50.423.354.429 trillion, year 20014 amounting to Rp. 58.684.782.718 trillion, in 2015 amounting to Rp 67.272.263.783 trillion, and the position of Nov 2016 of Rp. 74.360.521.253 trillion [1]. Based on these data shows that nationally BPRs experienced a positive growth. If seen from the growth of assets over the last four years seems to grow positively, in 2013 amounting to Rp 77.278.269.030 trillion, in 2014 of Rp. 89.855.620.703 trillion, in 2015 amounting to Rp 101.707.090.769 trillion, and the position of November 2016 of Rp. 111.321.753.445 trillion. While the number of BPR

institutions for the last three years as follows: in 2013 amounted to 1643 units, in 2014 amounted to 1637 units, 2015 amounted to 1644 units, and the position of November 2016 amounted to 1637 units. Special appearances for BPR institutional aspects have fluctuated this as a result of the merger and consolidation of some BPRs in an effort to increase the strength of the capital structure and business competitiveness of BPR [1].

The performance growth of rural banks is inseparable from the role of the government both in terms of economic control and the making of a number of policies, such as economic policy packages and tax amnesty. However, the challenges are still huge as in the last five years on non-performing loans nationally which is still high, in 2016 is still in the range of 6.56%. The condition of Rural Banks institutionally will be seen from the performance achieved. BPR performance can be measured through indicators, efficiency, liquidity, capital adequacy, credit risk, and profitability. Based on this, the researcher is interested to conduct research on the performance of Rural Banks in Indonesia by using Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), Non-Performing Loan (NPL), BOPO, SIZE, and Return on Assets (ROA).

RESEARCH PURPOSES

- To know and analyze Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), Non-Performing Loan (NPL), BOPO, SIZE, and Return On Assets (ROA) at Conventional Rural Banks In Indonesia
- To know and analyze the influence of Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), Non-Performing Loan (NPL), BOPO, and SIZE, partially and simultaneously to Return On Assets (ROA) at Conventional Rural Bank In Indonesia

LITERATURE REVIEW

Company performance is a totality of achievements achieved by the company's organization within a certain period of time. Understanding performance is a noun which means: 1) something achieved, 2) achievements are shown, 3) working abilities. Company performance information is generally required to assess potential changes in economic resources that want to be controlled in the future [2]. Performance information is useful for predicting the capacity of firms to generate cash flow from existing resources, besides that the information is useful in formulating considerations about the effectiveness of firms in utilizing additional resources [3]. By performing a performance assessment, it will be known as well as past performance and whether there is the consistent improvement in performance. Besides required various sizes or standards is equally important is the existence of sufficient time span so as to be able

to see better performance development [4]. Performance is a difficult and multidimensional concept, a measurement system using only a single measurement dimension is incapable of providing a comprehensive understanding [5]. Financial Performance Appraisal at Rural Banks (BPR), referring to common indicators in use include Capital Adequacy Ratio, Loan to Deposit Ratio (LDR), Non-Performance Loan (NPL), BOPO, Size, and Return on Assets (ROA).

Capital Adequacy Ratio (Car)

Capital is a very important factor for the development and progress of banks and efforts to maintain public trust. Bank Indonesia (BI) as the monetary authority establishes the provisions on the minimum capital requirement obligation that every bank must maintain. Capital coverage is an important factor of the bank in the framework of business development and accommodates the risk of loss. Bank Indonesia requires the provision of minimum capital which must be maintained by each bank as a certain proportion of total Risk-Weighted Assets (RWA). Bank Indonesia sets the ratio of capital adequacy ratio to a minimum of 8 percent [6]. Capital Adequacy is the capital adequacy, shows the bank's ability to maintain sufficient capital and the bank's management capability in identifying, measuring, controlling, and controlling risks that may affect the amount of bank capital. The calculation of capital adequacy is based on the principle that any allocation of risk-bearing funds should be provided with a certain percentage of capital to the amount of allocation of funds with the following formula:

$$\text{Capital Adequacy Ratio} = \text{Own Capital} / \text{RWA} \times 100\% \dots\dots\dots(1)$$

CAR is the main proxy for bank capital, banks with high capital are considered relatively safer compared with low capital, this is because banks with high capital usually have lower requirements than external funding [7]. The results showed the greater the capital adequacy of the bank, the higher the profitability [8-10]. The determination of the capital adequacy ratio at a certain level is intended to enable the bank to have sufficient capital capability to mitigate the possibility of risks as a result of the development or increase of asset expansion, especially assets that are categorized as yielding and at the same risk [11]. The variable of capital adequacy ratio has a positive and significant effect to profit change [12]. Capital Adequacy Ratio has a significant positive effect on profitability [13]. However, it is inconsistent with other findings that capital adequacy ratio has no significant effect on the variable of earnings change [14, 15]. Capital adequacy ratio negatively influenced not significant on Return on Asset [13]. CAR has a negative correlation with profitability [16].

Loan to Deposit Ratio (LDR)

Loan to Deposit Ratio (LDR), is the ratio of the possibility of depositors or borrowers withdraw funds from banks. Another word LDR is the ratio of bank performance to measure bank liquidity in meeting the needs of funds withdrawn by the community in the form of savings, demand deposits, and deposits. LDR is the ratio of credit to third-party funds which includes demand deposits, savings, and deposits. LDR is a ratio that shows the ability to perform its intermediary function in channeling third-party funds to credit. If this ratio shows a low number then the bank is in idle money condition or excess liquidity which will cause the bank to lose the opportunity to earn the bigger profit.

The Bank is required to maintain its liquidity and ensure smooth operation in fulfilling its obligations. Banks with large assets have the opportunity to channel their credit to the borrower in larger amounts, thus earning a high profit [16]. According to Bank Indonesia Circular Letter Number 13/24 / DPNP dated October 25, 2011, the LDR ratio can be formulated as follows [6]:

$$\text{Loan to Deposit Ratio (LDR)} = \text{Total Credit} / \text{Third party Fund} \times 100\% \dots\dots\dots(2)$$

The ability of banks to close liabilities in the short term has an influence on bank profitability. The results show that bank liquidity can improve the profitability of domestic banks [17, 18]. Other studies have shown a positive influence between loan to deposit ratio on return on assets [19, 9, 10, 20, 21]. The study of commercial banks in Malaysia showed that LDR had no significant positive effect on ROA on 5 banks in Malaysia, one bank with negative influence was not significant, and one bank had a positive influence [22]; Partially LDR has a positive effect on ROA [23]. The results of this study contradict with previous research [24], that LDR has a significant negative effect on return on asset, but [12], found that LDR has a positive and insignificant effect to Profit Change. LDR shows the ability of a bank in providing funds to its borrowers with capital owned by banks and funds that can be collected by the community, in other words, how much credit giving to credit customers can offset the bank's obligation to immediately meet the demand of depositors who want to withdraw the money has been used by banks to provide loans provided with total third-party funds. The great LDR set by government regulations is a maximum of 110%.

Non-Performing Loan (Npl)

Non-Performing Loan (NPL) is a ratio used to measure the ability of banks to bear the risk of failure of credit repayment by the debtor. Non-Performing Loans (NPLs) or non-performing loans are among the key indicators for assessing bank function performance. One of the functions of the bank is as an intermediary

institution or liaison between parties who have excess funds with parties who need funds. Banks should be careful in channeling credit in order not to result in high NPLs. One way to reduce risk, banks usually look for other investment alternatives that are lower risk, such as placing funds on financial instruments such as Bank Indonesia Certificates that have low risk but provide certainty of results. NPL is a ratio to measure the ability of banks in maintaining the risk of failure of credit repayment by debtors, the smaller the NPL the less the credit risk borne by the bank. In order for the bank's value to this ratio, Bank Indonesia will determine the NPL ratio of less than 5%. Calculation of NPL ratio as follows:

$$\text{Non-Performing Loan} = \text{Non-Performing Loans} / \text{Total Credits} \times 100\% \dots\dots\dots(3)$$

The results showed that NPL had a positive and insignificant effect on earnings change [12]. Other studies have shown that NPL has a significant effect on variable earnings changes [14]. While commercial banks in Nepal NPL negatively affect ROA [25], while [16], showed that NPLs have a negative correlation with profitability. NPLs reflect the credit risk of a bank where the smaller the problem loans, the less the credit risk borne by the banks. The higher this ratio, the worse the credit quality of the bank causing the number of nonperforming loans, the bank must bear the loss in its operational activities so that it affects the decrease in bank profit.

Operating Cost And Operating Income (Bopo)

BOPO is a comparison between operational costs and operating income. This ratio is often also referred to as the efficiency ratio used to measure the bank's management capability in controlling operational costs against operating income. The smaller this ratio means the more efficient the operational costs incurred by the bank concerned so that the possibility of a bank is in a less problematic condition. BOPO ratio indicates the existence of operational risks borne by the bank. Operational risk occurs due to uncertainty about the bank's business, including the possibility of losses from operations if there is a decrease in profits that are affected by the bank's operating cost structure and possible failure of new services and products which is offered.

Operational risk may arise if the bank does not consistently follow the rules of the applicable rules.

BOPO ratio is used to measure bank operational efficiency, by comparing operational costs to operating income [7]. Operational cost is the cost incurred by the bank in carrying out its daily activities include: the cost of salaries, marketing costs, interest costs. While the operating income is income received by the bank obtained through the channeling of credit in the form of interest rates. According to Bank Indonesia

Circular Letter Number 6/23 / DPNP dated May 31, 2004, BOPO ratio formula is [26]:

$$\text{BOPO} = \text{Operational Cost} / \text{Operating Income} \times 100 \dots\dots\dots(4)$$

Several previous studies that examine the BOPO in relation to profitability among others show that BOPO has no significant effect on the variable of profit change [14]. BOPO negatively affects earnings change [12]; BOPO and NPL partially have negative effect on ROA, but LDR have positive effect on ROA, while simultaneously BOPO, NPL, CAR, NIM have significant influence on ROA [27]; BOPO has a significant negative effect on ROA [28]; in Bank Syariah in Indonesia partially BOPO have negative effect on ROA, while simultaneously BOPO, NPF, NIM, FDR, PPAP, NPA, EA, LIQD have significant influence to ROA [29]; research on Government banks and private banks in Indonesia, partially BOPO NIM and NPL have significant effect on ROA in government banks, while private banks only BOPO and CAR [30]; Partially LDR and NPL have negative effect to ROA, but BOPO is positive, simultaneously BOPO, LDR, NPL, CAR, NIM have significant influence on ROA [31]; partially negative CAR is not significant, NPL has a significant negative effect, while simultaneously CAR and NPL have no significant effect on ROA [13].

Size

Many factors affect the ability of banks in achieving its performance, including capital adequacy, expansion capability, efficient operations, competitive interest rates, adequate risk control, and size of the company (size). The size of the company becomes one important factor considering the size of the bank will affect the fundamental strength of the bank and will affect the ability to improve profitability. In addition to firm size can increase the profitability of the company [32], firm size also has an impact on the efficiency of a bank [33]. Relative size (SIZE) has a positive and significant impact on profitability represented by ROA and ROE [16]. The size of the company in this study is based on the amount of total assets owned by the company. Assets are one of the key components in the company. Larger banks the size of their assets are more profitable than banks whose size of assets is small, because larger bank sizes have higher efficiency [34]. The firm size formula variables are:

$$\text{Company Size (Size)} = \text{Ln Total Asset} \dots\dots\dots(5)$$

The results showed that the variable size of the bank (size) has a positive effect on bank ROA [35]. The larger the (banking) business coverage or the larger market share, which can increase efficiency. Increased business efficiency has a positive impact on the profitability of these banks [32]. Firm size (firm size) gives an ambiguous effect on company performance.

First, that the larger the size of the company will lead to greater costs that will negatively affect the company's performance. Both big companies have economies of scale and flexibility that cause a positive relationship between company size and profitability [36]. Other research results show positive results on the size of profitability [17, 18, 37], but others found significant negative results [38]. While [39], found no relationship between firm size (size) and profitability of the company. Increasing the size or total assets of the company (banking) can reduce profitability so that the impact of the resulting decline in efficiency of the company.

Return on Assets (ROA)

Return on Assets (ROA) focuses the company's ability to earn returns in its operations. Return on Assets (ROA) is used to measure the efficiency and effectiveness of the company in generating profits by utilizing its assets. Return on Assets (ROA) is the ratio between profit before tax to total assets. The greater the Return on Assets (ROA) shows the better performance because the rate of return is greater. If the Return on Assets (ROA) increases, the profitability of the company increases, so the ultimate impact is profitability enjoyed by shareholders. According to Bank Indonesia Circular Letter Number 13/24 / DPNP dated October 25, 2011, Bank Indonesia determines ROA amounting to 1,215 percent including healthy [6], Return on Assets is obtained by using the formula:

$$\text{Return on Assets} = \text{Profit before tax} / \text{Average total assets} \dots\dots\dots(7)$$

Return on Assets is a parameter of the profitability of a bank. ROA reflects how much the return earned on each dollar of money invested in assets in other words ROA shows the business return on all assets owned. High ROA reflects the company's ability to optimize the use of assets to obtain an optimal return. Previous studies have shown that NPL has a significant positive effect on SDROA, while LDR and NIM variables show a significant negative effect on SDROA [40]. Research on commercial banking in Europe shows that CAR has a significant positive effect on SDROA [41]. Soedarmono *et al.*, [42], conducting research on banking in Asia result shows NPL have a negative significant effect, CAR has a negative effect is not significant, but SIZE has a negative significant effect to SDROA. The results of Dedi Kusmayadi *et al.*, [37], CAR, NIM, SIZE and operational costs have a significant effect on profitability, while efficiency only moderates CAR, NIM, NPF and SIZE effects on ROA.

Hypothesis

- Capital Adequacy Ratio, Loan to Deposit Ratio, and Size partially have a positive effect, while

Non-Performing Loan and BOPO have a negative effect on Return on Assets.

- Capital Adequacy Ratio, Loan to Deposit Ratio, Non-Performing Loan, BOPO, and Size simultaneously effect on Return on Assets.

RESEARCH METHODS

The object of research is something that will produce characteristics or characteristics that will be the attention of researchers [43]. Objects in this study variables: Capital Adequacy Ratio, Loan to Deposit Ratio, Non-Performing Loans, BOPO, Size, and Return on Assets. The unit of analysis of this research is Bank *Perkreditan Rakyat* in Indonesia. This research is explanatory, meaning that this research will explain deeply the cause and effect relationship between research variables or something [44]. The population is the sum of the overall unit of analysis that its characteristics will be suspected [44]. The population of research is Rural Bank in Indonesia period 2008 until 2016. The research data is taken from the publication of report per semester that is as much as 18 (eighteen) semesters. The variables used in this study consist of four variables, namely: 1) Capital Adequacy Ratio / CAR (X1), (Own Capital, RWA); 2) Loan to Deposit Ratio / LDR (X2), (Total Credits, Third Party Funds); 3) Non-Performing Loan / NPL / (X3), (Non-

Performing Loans, Total Loans; 4) BOPO (X4), (Operating Expenses, Operating Income); 4) Size (X5), (LnTotal Assets); and Return on Assets / ROA (Y), (Profit before tax, Average total assets). Research Data using secondary data, obtained from the publication of Central Financial Services Authority, Central Bank Indonesia, and other relevant publications. Analyzer used Multiple Regression Analysis.

EMPIRICAL RESULTS

Capital Adequacy Ratio, Loan to Deposit Ratio, Non-Performing Loan, Bopo, Size And Return On Assets At Rural Banks In Indonesia

Capital Adequacy Ratio, Loan to Deposite Ratio, Non-Performing Loan, BOPO, Size, and Return on Assets, are the main indicator variables in a bank's performance. The data obtained is a representation of the Rural Bank industry throughout Indonesia, so it can serve as a description of the performance of credit banks in the national scale. The data used is the performance of semesters starting from 2008 until the year 2016 as much as 18 semesters. The results of the study Capital Adequacy Ratio conditions, Loan to Deposite Ratio, Non-Performing Loans, BOPO, Size, and Return on Assets at Bank *Perkreditan Rakyat* in Indonesia are presented in table:1.

Table-1: Achievement of Capital Adequacy Ratio, Loan to Deposit Ratio, Non-Performing Loan, BOPO, Size, and Return on Assets, Per Semester Year 2008 up to the Year 2016.

NO	PERIODE/ SEMESTER	CAR	LDR	NPL	BOPO,	SIZE	ROA
		(%)	(%)	(%)	(%)	(Ln)	(%)
1	Jun-2008	22.67	82.55	7.35	79.03	31.633	3.58
2	Des-2008	23.33	82.58	9.88	82.82	31.803	2.62
3	Jun-2009	23.88	83.09	7.48	81.45	31.844	3.42
4	Des-2009	24.17	79.61	6.90	81.82	31.949	3.09
5	Jun-2010	23.63	82.04	6.53	78.76	32.031	3.95
6	Des-2010	30.01	79.02	6.12	80.97	31.454	3.16
7	Jun-2011	29.54	82.69	6.22	78.75	31.534	3.83
8	Des-2011	28.68	78.54	5.22	79.47	31.652	3.32
9	Jun-2012	27.91	83.62	5.27	77.57	31.725	3.89
10	Des-2012	27.55	78.63	4.75	77.77	31.841	3.46
11	Jun-2013	26.73	84.56	4.98	76.57	31.906	3.80
12	Des-2013	28.48	84.26	4.45	77.65	31.978	3.38
13	Jun-2014	28.27	85.60	5.08	79.87	32.017	3.36
14	Des-2014	28.02	79.40	4.76	80.30	32.129	2.99
15	Jun-2015	27.91	82.38	5.71	82.13	32.176	2.89
16	Des-2015	28.99	76.70	5.40	81.77	32.253	2.69
17	Jun-2016	29.69	79.83	6.20	82.42	32.293	2.61
18	Nov-2016	29.78	76.99	6.54	81.13	32.343	2.69

Source: www.ojk.co.id, 2016

Capital Adequacy Ratio (CAR) is a capital adequacy ratio that serves to accommodate the risk of losses that may be faced by banks. The minimum CAR for Rural Banks is 8%. Based on the results of the research as presented in table-1, showing Capital Adequacy Ratio achieved in 18 (eighteen) semesters by

Rural Banks in Indonesia has been able to meet the minimum capital adequacy of 8%, this provides evidence that viewed from the aspect of capital nationally are in the health category. The higher the CAR the better the bank's ability to assume the risk of any lending. If the CAR value is high then the bank is

able to finance its operational activities and contribute to profitability if it fits a healthy credit growth.

Loan to Deposit Ratio (LDR), is the ratio of the total amount of loans granted to banks with funds received by banks, this ratio shows the bank's liquidity rating. The higher the ratio gives an indication of the lower liquidity capability of the bank concerned as the amount of funds needed to finance the credit becomes greater. Based on the results of the study as presented in Table-1, it shows the loan to deposit ratio in 18 (eighteen) semesters, is in the healthy predicate (> 94.75). This suggests that the nation's rural credit industry has a healthy liquidity, which means it is able to provide funds to meet the obligations that will mature (short term).

Non-Performing Loan (NPL), reflects the credit risk of a bank, the smaller the problem loans, the less the credit risk borne by the bank. The higher the ratio, the worse the credit quality of the bank causing the higher the number of non-performing loans, therefore the bank must bear losses in its operational activities so as to give a bad impact on the quality of productive assets, as well as the ability of banks in creating profits. Based on the results of the research as presented in table-1, showing the loan to deposit ratio in 18 (eighteen) semesters, there are 4 semesters reaching healthy predicates, the Non-Performing Loan value is less than 5%, 13 semesters in the category of healthy predicate $5\% \leq NPL < 8\%$, and 1 semester is in the category of unhealthy predicate ($8\% \leq NPL < 12\%$). From the description of Non-Performing Loan achievement, it gives an indication that within 18 semesters credit quality that occurs in the industry of rural banks nationally not healthy, considering the non-current credit value is still indicated quite high. In fact, the last 5 semesters showed that Non-Performing Loan increased, which means that credit quality decreased although still in the category of the predicate is quite healthy.

BOPO is a ratio group that measures operational efficiency and effectiveness, ie a comparison between operational costs and operating income. The lower the BOPO means the more efficient the bank is in controlling its operational costs. Based on the results of the research as presented in table 1, showing for 18 (eighteen semesters), the Rural Bank industry in Indonesia is in the health category smaller than 96.60 (< 96.60). BOPO is an efficiency ratio, used to measure the bank's management capability in controlling operational costs against operating income. Viewed from the achievements of BOPO, giving an indication of the overall managerial capability of the rural bank credit industry in Indonesia is still efficient, able to control the operational costs adequately. The smaller the ratio of BOPO, the national rural bank's industry shows the better in controlling the efficiency of

its operational costs, thus will further encourage the more profitable industrial rural banks in Indonesia.

Size companies in this study using the total indicator of assets, which is a representation of the wealth and bonafide of an entity. The bigger Size with the optimal proportion will give better performance impact. Likewise in the order of rural banks, the larger the size of banks will strengthen the fundamentals of the banking industry so that it can affect the ability of companies to increase profitability. Based on the results as presented in the table-1, showed an 18 (eighteen semesters), industrial credit banks in Indonesia to grow positive people, although in 2011 decreased, but from that year the asset continues to grow. This condition shows that the national rural bank industry continues to receive a positive response from the community so that in more than 12 assets grew last semester average per semester in the range of 7.73 trillion.

Return on Assets is one of the profitability ratios, in the analysis of financial statements, this ratio is most often highlighted. Assets or assets in question is the entire property of the company, obtained from the capital itself or from the foreign capital that has been converted the company into the company's assets used for the survival of the company. Based on the results as presented in the table.1, it shows for 18 (eighteen semesters), the People's credit bank industry in Indonesia from the aspect of Return on Assets is in the healthy category (> 1215). Healthy Return on Assets provide indications that the rural bank industry in Indonesia is able to control and use assets optimally to generate returns in the form of corporate profits.

Partial And Simultaneous Effect Of Capital Adequacy Ratio, Loan To Deposit Ratio, Non-Performing Loan, Bopo, And Size On Return On Assets At Rural Banks In Indonesia

The partial influence of Capital Adequacy Ratio to Return on Asset obtained by regression coefficient equal to -0.042 (negative), so the hypothesis proposed that Capital Adequacy Ratio positive effect on Return on Asset untested or in other words research hypothesis in decline. Judging from the value of significance shows the significance value of 0.145 (Table-2), greater than the critical value (alpha) of 0.05, thus the effect is not significant. Based on the results of the analysis gives the meaning that the higher Capital Adequacy Ratio cannot contribute proportionally increase the Return on Asset. High CAR will provide the ability for banks to bear credit risks and finance operational activities even able to impact on the creation of profitability if in line with the growth of productive assets quality and sound credit. This condition is not consistent with the condition occurring in Rural Banks in Indonesia although viewed from the higher CAR but on the other hand there is a decreasing ROA trend. This is thought to be the impact of lending

growth or slower loan expansion, the higher credit risk represented by the declining quality of productive assets, interest rate, competition factor, regulation, and other factors. The findings of this study are consistent with previous research from Soedarmono *et al.*, [42, 14, 15], that the capital adequacy ratio has no significant effect on bank profitability, Soedarmono and Prasetyantoko [45] found significant negative CAR to SDROA, and Dedi Kusmayadi[13], found that CAR had negative effect significant to ROA. However, it is not consistent with the results of previous research [12, 41, 46, 37], that capital adequacy ratio has a positive and significant impact on bank profitability.

The effect of Loan to Deposit Ratio (LDR), partially to Return on Asset is shown by regression coefficient value of 0.026 (positive), so the hypothesis proposed that Loan to Deposit Ratio have a positive effect on Return on Asset tested or in other words research hypothesis accepted. Judging from the value of significance shows the significance value of 0.231 (table-2), greater than the critical value (alpha) of 0.05, thus the influence is not significant. Based on the results

of the analysis, it means that the liquidity aspect or the ability of the entity to provide funds to meet the matured obligations that are repressed with Loan to Deposit are controlled and proportionally grow in line with the growth of Return on Asset. Thus within 18 semesters, the Rural Bank industry in Indonesia has been able to control bank liquidity, while still able to control profitability although seen from Return on Asset there is a downward trend. Loan to Deposit Ratio is too high indicates aggressive credit expansion so that with the quality of controlled assets, the bank will be able to create profitability, but on the other hand, will disrupt the liquidity of the bank in case of withdrawal of funds by customers. Low Loan to Deposit Ratio will lead to over liquidity so that it is possible idle fund because the funds are not channeled which affects the decline in the ability of banks in creating profitability. The findings of this study are consistent with previous research [17, 9, 10, 20, 21, 47]. There is a positive influence between loan to deposit ratio on return on assets. However, inconsistent with previous research [40, 24], that Loan to Deposit Ratio has a significant negative effect on return on asset.

Table-2: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	28.793	6.508		4.424	.001
CAR	-.042	.027	-.226	-1.543	.145
LDR	.026	.021	.151	1.252	.231
NPL	-.042	.067	-.114	-.635	.536
BOPO	-.144	.042	-.588	-3.453	.004
SIZE	-.460	.209	-.272	-2.199	.045

a. Dependent Variable: ROA

The effect of Non-Performing Loan(NPL) on Return on Asset is shown by regression coefficient value of 0.042 (negative), thus the hypothesis proposed by Loan to Deposit Ratio negatively affect Return on Asset tested, or in other words research hypothesis accepted. Judging from the value of significance shows the significance value of 0.536 (table-2), greater than the critical value (alpha) that is equal to 0.05, this shows the effect is not significant. Based on the results of the analysis gives the meaning of the higher Non-Performing Loan will impact on the declining ability of banks in creating Return on Asset. The increasing Non-Performing Loan provides an illustration that the quality of the bank's productive assets is declining or in other words the increasingly troubled credit. This condition then the profitability of banks will be disrupted. The findings of this study are consistent with previous Aryanti [14], Usman [48], Soedarmono and Prasetyantoko [45], Soedarmono *et al.*, [42], Dedi Kusmayadi [13] reports that NPL negatively affect ROA. However inconsistent with previous research [12, 40], NPL had a significant positive effect on SDROA.

The effect of BOPO on Return on Asset is shown by regression coefficient value of 0.144 (negative), so the hypothesis proposed that BOPO negatively affect the Return on Asset tested or in other words research hypothesis (Ha) accepted. Judging from the value of significance shows the significance value of 0.004 (table-2), smaller than the critical value (alpha) of 0.05, thus the effect is significant. Based on the results of the analysis gives the meaning that the higher BOPO will have an impact on the declining ability of banks in creating Return on Assets. The increasing BOPO illustrates that banks are unable to control operational costs (inefficiencies) to generate operating income, and vice versa if a low BOPO value illustrates that banks are able to control operating costs efficiently and effectively in generating operational revenues. The findings of this study are consistent with previous research [12] that there is a significant effect of BOPO on changes in earnings, but inconsistent with other research [14], that BOPO has no significant effect on variable change in profit

If seen from the effect size to Return on Asset, shown by the value of regression coefficient of 0.460

(negative), so the hypothesis proposed that Size positive effect on Return on Asset untested or in other words research hypothesis rejected. Judging from the value of significance shows the significance value 0.045 (table-2), smaller than the critical value (alpha) that is equal to 0.05, thus the influence is significant. Based on the results of the analysis gives the meaning that the

increasing value of bank size is not linear with the growing growth of Return on Asset, even the result of analysis with the growth of size, in this case, total assets provide trend Return on Asset decline. The results of this study are relevant to previous studies [38, 42, 49]. However, it is inconsistent with other studies [35, 50, 51, 37].

Table-3: F Test ANOVA^b

Model	Sum of Squares	Df	Mean Square	F	Sig.	
1	Regression	3.540	5	.708	17.868	.000 ^a
	Residual	.555	14	.040		
	Total	4.095	19			
a. Predictors: (Constant), SIZE, NPL, LDR, CAR, BOPO						
b. Dependent Variable: ROA						

While the influence simultaneously (table-4), CAR, LDR, NPL, BOPO and Size to Return On Asset of 86.5%, and the remaining 13.5% is the variable factor of suspected residues, among others, Third Party Fund, Interest Rate, regulation and other factors. The

result of significance test shows that F significance value is 0.00 (table-3), smaller than the critical standard (alpha) which is set at 5% means that it has a significant effect.

Table-4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.930 ^a	.865	.816	.19906
a. Predictors: (Constant), SIZE, NPL, LDR, CAR, BOPO				

The hypothesis proposed that the Capital Adequacy Ratio, Loan to Deposit Ratio, Non-Performing Loan, BOPO, and Size simultaneously affect the Return On Assets, the Rural Bank in Indonesia tested (hypothesis research accepted), it gives meaning that the combination of variables studied namely Capital Adequacy Ratio, Loan to Deposit Ratio, Non-Performing Loan, BOPO, and Size are some combination of key factors that have a strong influence on performance Return On Assets at Rural Banks in Indonesia.

CONCLUSION

Capital Adequacy Ratio that describes the adequacy of capital is in the category of healthy predicate and tend to be more strengthened, Loan to Deposit Ratio is in healthy predicate, this gives an overview of the level of ability of banks in fulfilling short-term customer obligations, Non-Performing Loan provides a declining trend , means higher credit risk, BOPO which measures the level of efficiency of operation is in the category of healthy predicate, Size shows a positive or rising trend, while Return on Asset is in the category of healthy predicate although there are indications of decreasing.

Influence of partial, Capital Adequacy Ratio negatively nonsignificant to Return on Asset, Loan to Deposit Ratio have a positive effect not significant to Return on Asset, Non-Performing Loan negative effect not significant to Return on Asset, BOPO significant negative effect on Return on Asset, and size has a

significant negative effect on Return on Asset. While simultaneously Capital Adequacy Ratio, Loan to Deposit Ratio, Non-Performing Loan, BOPO, and Size have a significant effect on Return on Asset.

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