

Analysis of Factors Affecting Bank Profitability with Total Assets Minimum 1 (One) Billion

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ABSTRACT

This research was conducted to examine the effect of variable banking ratio, funds interest rate, interest spread, fee based income ratio and inefficiency ratio of Profitability (ROA). Profitability is used to measure the effectiveness of management based on results generated from the loan repayment and investment. The ratio is important for the bank's profitability is Return On Assets (ROA). Financial ratios that affect the ROA is the banking ratio, funds interest rate, interest spread, fee based income ratio and inefficiency ratio. The sampling technique used was purposive sampling with the criteria of commercial bank serving the financial statements. The analysis technique used is the classical assumption of the analysis, multiple regression analysis and hypothesis test with a level of significance of 8,841%. The results of the research simultaneously (test F) states that the banking ratio, funds interest rate, interest spread, fee based income ratio and inefficiency ratio jointly affect the profitability (ROA) of banks. While the results show that the correlation coefficient between profitability (ROA) of banks with 5(five) independent variables of 60,336%. And the result of research partially (t) states that the variable interest spread did not have a significant effect on profitability (ROA) of banks. And variable banking ratio, funds interest rate, fee based income ratio and inefficiency ratio significant effect on profitability (ROA) of banks.

Keywords: Financial ratios, Profitability (ROA).

I. Introduction

During the period of half a century, the attention of the world's economic community has been focused on ways to accelerate national economic growth. Economists and politicians from all countries really crave and prioritize economic growth (economic growth). Various advances and developments have been achieved to improve the Indonesian economy. One indicator of this success can be seen from the average economic growth in Indonesia of 5.11% per year in the research period. The average economic growth figure shows that Indonesia's development performance is quite high. This is inseparable from the participation of various parties such as the community, government, economic actors, and also foreign parties.

The magnitude of the provision of public facilities has a correlation with the amount of government spending. A country's government spending describes a financing of government activities. As is well known, government spending through the Budget

State Expenditure and Expenditure (APBN) is reflected in the realization of the routine budget and

DOI

the realization of the development expenditure budget, while the total amount of revenue includes domestic revenue which is called development revenue. Judging from its purpose, routine expenditure is operational expenditure and absolutely must be carried out as well as consumptive, but not all routine expenditure budgets can be categorized as consumption expenditure (current expenditure), for example, such as spending on purchasing office inventory, government spending on office buildings and others. Government expenditure in general consists of routine expenditure and development expenditure.

Return On Assets

Return on assets reflects the ability of the bank's management to generate net profit before tax for every rupiah managed by the bank. There are 8 factors that make up the return on assets, namely: 1) (L/TA) = ratio of credit to total assets, namely the ability of a bank to extend credit from the total assets it manages. 2) = Weighted average loan interest rate. 3) (F/TA) = Ratio of third party funds with interest to total assets, namely the bank's ability to collect funds from the public. 4) (IE/F) = Weighted average interest rate on funds. 4) (IT/TA) = Assets utilization = productivity = bank's ability to generate income from all the total assets it manages. 5) (FBI/TI) = Ratio of fee-based income to total income = Innovation ratio = the bank's ability to create income other than interest from total income. 6) (TE/TA) = bank efficiency ratio

= bank's ability to control all expenses to generate total income. 7) (OE/TA) = Internal efficiency ratio = bank's ability to control expenses other than interest to manage all bank assets. When reviewed further, the return on assets is formed by 2 (two) elements, namely the net interest income ratio (the ratio of net interest income) and the net other ratio of expenses (the ratio of other net expenses) or other expenses that have not been covered by fee-based income. According to Chanon (1994), net interest income (total net interest income) is affected by the interest spread or the difference between the credit interest rate and the deposit interest rate.

Banking ratio

Banking ratio is a ratio that reflects the ability of bank management to manage public funds or the ability of banks to market credit from public funds that have been successfully collected. Banking ratio is the ratio used to determine the level of bank liquidity by comparing the amount of financing distributed with the amount of deposits held. The higher the ratio, the lower the level of liquidity because the amount of funds used to finance financing is getting smaller.

Funds interest rate

Fund interest rate is the weighted average interest rate of the portfolio of public funding sources collected by the bank. The interest rate is set when a bank provides a loan to a customer. This interest rate also applies when customers deposit their money in the bank. According to Georgievska (2011) funds interest rate has a positive and significant effect on return on assets.

Interest spread

Interest spread is the excess of the credit interest rate above the interest rate on public funds or the difference between interest receipts and interest expenditures. It is from this difference in interest rates that a bank can expect net interest income in carrying out the bank's main function as a financial intermediary. According to Lukman Dendawijaya (2000: 107) spread or it can also be called net margin is the bank's main income and will determine the size of the

DOI

bank's net income.

Fee based income ratio

Fee based income ratio is the bank's ability to create new products to increase the contribution of non-interest income. Fee-based income is bank income outside of income from loan interest, namely income from credit interest, namely income that comes from outside the main activities of banking services. This source is a fairly safe alternative income. In this case, the fee-based income ratio means the weight of the non-interest income contribution to the Bank's Total Income. Fund interest rates will affect credit interest rates. Therefore, the loan interest rate can be used as a variable because it is already represented by the deposit interest rate.

Inefficiency internal ratio

Inefficiency Internal Ratio is the ratio of excess expenses other than interest (total other expenses) over total income other than interest (fee-based income) to total income. A ratio that identifies the efficiency of a business in using its assets to generate sales. This ratio is usually used to analyze how well a company is using its assets and liabilities internally. According to Defri's research (2012) it states that the internal inefficiency ratio has a significant effect on return on assets, which for investors is a material consideration for determining their investment strategy, namely by paying attention to the profitability of a company.

Profitabilitas

Profitabilitas is the ability to generate profit/profit during a certain period by using assets or capital, both overall capital and own capital. To understand bank profitability, it is necessary to know the meaning of the content and role of a bank as well as bank performance. According to Hempel (1994), commercial banks are financial intermediary institutions between parties who have excess (surplus) funds and those who need funds.

Based on the analysis above, the authors conclude that the model to be used to predict the various variables that affect ROA are as follows:

Banking Profitability Model
$Y = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + B_5X_5$

In which:

- $Y =$ Return on Assets
- $X_1 =$ Banking Ratio
- $X_2 =$ Interest Spread
- $X_3 =$ Funds Interest Rate
- $X_4 =$ Inovation Ratio
- $X_5 =$ Inefficiency Internal Ratio

II. Method

Population and sample

The population that became the object of research were all banks with a minimum asset of 1 (one) billion for the period of December 2000 to December 2001. In this case there were 45 banks consisting of government banks, national foreign exchange private banks, non-foreign national private banks, regional development banks, joint venture banks and foreign banks. Here, bank financial reports published through mass media or banking directories issued by Bank Indonesia are used so that it is assumed that the financial statements are unconditionally feasible because they have been audited by an accountant.

Variables Description Analysis

Of the 45 banks with minimum assets of 1 (one billion), the authors will present a description or general description of the data or condition of the banks.

Main Data Description

Variables	Average	Deviati on Standa rd	Average Standard Deviation	of Max.	Min.
Return on asset	1.1%	0.4%	0.36%	1.9%	0.1%
Banking ratio	123.8%	2.9%	0.023%	21.3%	5.1%
Funds interest rate	3.7%	0.2%	0.05%	29.3%	3.2%
Interest spread	5.8%	1.1%	0.18%	2.5%	0.69%
Fee based income ratio	11.2%	7.4%	0.66%	25.4%	1.9%
Inefficiency internal ratio	18.7%	2.7%	0.144%	25.4%	1.6%

From the description of the data, it is obtained that the average return on assets (Y) of banks with a minimum total asset of 1 (one) billion is 1.1% with a standard deviation of 0.4% where the highest return on assets is 1.9% and a minimum of 1%. The standard deviation of the average return on assets is 0.36% of the average return on assets. The average banking ratio (X1) is 123.8%, meaning that the average ability of a bank with a minimum total asset of 1 (one) billion to market credit is 123.8% of the public funds it has managed to collect. And the standard deviation of this banking ratio is 2.9%. Thus, on average, a bank with a minimum total asset of 1 (one) billion is able to channel public funds in the form of credit of 1,238 times the amount of public funds. Which he managed to collect.

The interest rate on public funds or the funds interest rate (X2) is 3.7% with a standard deviation of 0.2% where the highest interest rate on funds is 29.3% and the lowest is 51%. Variation of the interest rate on public funds is relatively small, namely only 0.054% of the average interest rate on public funds.

The average interest spread (X3) is 5.8% with a standard deviation of 1.1% where the highest interest spread is 6.9% and the lowest is 3.4%. The variation in the interest spread is quite large, namely 1.89% of the average interest spread. By combining X2 and X3, we get a weighted

DOI

average loan interest rate of 9.5%.

The average fee-based income ratio (X4) is 11.2%, meaning that on average 88.8% of a bank's income with a minimum total asset of 1 (one) billion comes from interest income. Thus, the dependence of banks with minimum total assets of 1 (one) billion on interest income is still very high. In fact, at the extreme point, there are banks where 99.6% of their income comes from interest income. And conversely there are also banks whose interest income is only 61.3% of total income. Bank dependence on interest income varies greatly from one bank to another. The amount of interest income is very dependent on the amount of credit extended and the interest rate on the loan. Fund credit amount is very dependent on the amount of public funds. The relationship between these two variables can be seen in the average banking ratio (X1).

The average internal inefficiency ratio (X5) is 18.7% with a standard deviation of 2.7% meaning that on average, non-interest expenses that cannot be covered by non-interest income are 18.7% or the average non-interest expenses are 29.9% because the average -The average Fee Based Income Ratio is 11.2%.

Data Analysis Method

To test the effect of banking ratio, funds interest rate, interest spread, fee-based income ratio and internal inefficiency ratio on the profitability of a bank's total assets, multiple linear regression analysis is used with a significance level of 5%. To meet the requirements for a good regression model, it is necessary to test the classical assumptions, namely the multicollinearity test, test the simple correlation coefficient (R Square) for each independent variable with the dependent variable above 0.10, the correlation coefficient (R Square) for each independent variable with other load variables = < 0.50 and testing significance with F test with one tail test and T test also using hypothesis and hypothesis test.

III. Discussion

Correlation and Regression Results

To analyze the effect of various independent variables on return on assets, the writer will first analyze the simple regression correlation coefficient between the independent variables and the dependent variable. We can select the feasibility of the variables to be included in the calculation of the multiple regression equation. The results of a 1-sided correlation between variables and their significance are as follows:

DOI

Correlation, 1 Tailed, Sig

Y	X1	X2	X3	X4	X5			
		Y	1.000	(0.760)	(0.698)	(0.226)	0.165	(0.487)
			0.000	0.000	0.016	0.000	0.000	0.000
		X1	(0.760)	1.000	0.655	0.099	0.052	0.330
			0.000	0.000	0.000	0.006	0.012	0.001
		X2	(0.698)	0.655	1.000	(0.072)	0.065	0.485
			0.000	0.000	0.000	0.002	0.000	0.000
X3 (0.226)	0.099	(0.072)		1.000	0.085	(0.120)		
			0.016	0.006	0.000		0.012	0.031
X4	0.165	0.052	0.065	0.085	1.000	0.061		
			0.000	0.012	0.002	0.012	0.005	
		X5 (0.487)	0.330	0.485	(0.120)	0.061	1.000	
			0.000	0.001	0.000	0.031	0.005	

From the table it is clear that each independent variable has a fairly simple correlation coefficient that is >0.10 or <-0.10 with the dependent variable and has a high significance, namely Sign F <0.05. In addition, the correlation coefficient between the independent variables is low, which is below 0.50. Thus, the five independent variables are feasible to be included in the calculation of the multiple regression equation.

Regression Equation Results Y=f (X₁, X₂, X₃, X₄, X₅)

Variabel	B	SE B	VIF	T	SIG T
X ₁	(0.06931)	0.010256	1.823	(6.759)	0.0000
X ₂	(0.70410)	0.162330	1.082	(4.338)	0.0000
X ₃	(0.09947)	0.020944	1.065	(4.750)	0.0000
X ₄	0.014355	0.003013	1.014	4.764	0.0000
X ₅	(0.03507)	0.009230	1.325	(3.800)	0.0003
Konstanta	0.133672	0.009815		13.619	
Multiple R		0.884100		F	60.336
R Square		0.7816		Signif F	0.0000
Y = 0.133672 – 0.06931X₁ – 0.70410X₂ – 0.09947X₃ + 0.01435X₄ – 0.03509X₅					

DOI

This regression equation is obtained by Multiple Regression or by R Square 0.78163 and F Test = 60.13363 or Significance F = 0.0000 and the significance of t for all independent variables is very high, namely 0.0000. In addition, the Variance Inflation Factor (VIF) of each independent variable is also small, namely below 2.0. This means that the multiple regression coefficient of each independent variable individually with all other independent variables is less than 0.50.

The Most Dominant Variables Affecting Return on Assets

In order to know the effect of each independent variable, the authors use the R Square of the regression equation. The effect of each variable can be measured by its additional contribution (marginal effect) which is reflected by the R Square regression equation. As for the processing results in the order of processing the variable fee-based income ratio (X4), interest spread X3), funds interest rate (X2), internal inefficiency ratio (X5) and finally the banking ratio (X1) with the following results:

Deskripsi Data Tambahan

Entered Variables	Coeff. M.R.	R. Square Multiple Regression	Marginal Influence	Coeff. Simple Reg.
X4	0.615	78.16%	78.16%	0.165
X4,X3	0.1647	2.7%	75.46%	(0.226)
X4,X3,X2	0.7294	53.20%	50.5%	(0.698)
X4,X3,X2,X5	0.750	56.30%	3.1%	(0.487)
X4,X3,X2,X5,X1	0.850	72.29%	16.99%	(0.760)

By including the fee based income ratio (X4), we get multiple regression coefficients 0.165 or with R. Square 78.16%. This means that the magnitude of the effect of variations in the fee-based income ratio on variations in return on assets is 78.16%. Then by adding the interest spread variable, the effect of the free variable fee-based income ratio and interest spread on the return on assets increases to 0.1647%. This means that the additional effect of the interest spread on the return on assets is 2.7%.

By adding the variable funds interest spread, the effect of the three independent variables increases to 0.7294%. Means that the marginal effect of the funds interest spread (interest rate on funds) is 53.20%. And after adding the internal inefficiency ratio variable, the four independent variables increase to 0.750%. It means that the marginal effect of the internal inefficiency ratio is only 56.30%.

Finally, by adding the banking ratio, the effect of the five independent variables increases to 0.850% so that the additional effect of the banking ratio is only 72.29%. But when compared with the effect of each independent variable directly by looking at the R square of the simple regression coefficient of each independent variable on return on assets, we find that there is a joint effect of the synergy of several independent variables on return on assets.

B. Factors that Influence Profitability

Based on statistical tests, it can be seen that the hypothesis which states that banking ratios, funds interest rates, interest spreads, fee-based income ratios and internal inefficiency ratios have

DOI

an effect on bank profitability (ROA) are as follows:

1. The influence of *banking ratio* variable towards *profitability*

From the regression equation, it can be seen that the banking ratio has a positive and significant effect on bank profitability, which means that if the banking ratio increases assuming the other variables are constant, it will be followed by an increase of 0.06931. Meanwhile, the effect of 4 other independent variables plus the banking ratio on return on assets (ROA) increased to 0.850 (additional data description table) so that the additional effect of the banking ratio was 72.29%. This research is in accordance with Kasmir's theory (2014: 132) which states that the higher the ratio, the lower the level of liquidity because the amount of funds used to finance financing is smaller, and vice versa.

2. The influence of *funds internal rate* variable towards *profitability*

Based on the regression equation, it can be seen that the internal funds rate has a positive and significant effect on bank profitability, which means that if the internal funds rate increases assuming the other variables are constant, it will be followed by an increase of 0.7041. Meanwhile, the effect of 2 other independent variables plus the internal funds rate on return on assets (ROA) increased to 0.729 (additional data description table) so that the additional effect of the internal funds rate was 53.20%. This research is in accordance with the theory of Georgievska (2011) which states that the funds interest rate has a positive and significant effect on return on assets.

3. The influence of *interest spread* variable towards *profitability*

Based on the regression equation, it can be seen that the interest spread has a negative and insignificant effect on bank profitability, which means that if the interest rate increases assuming other variables are constant, it will be followed by an increase of 0.0994. Meanwhile, the effect of 1 (one) other independent variable is added to the interest spread to return on assets (ROA) increased to 0.1647 (table description of additional data) so that the additional effect of the internal funds rate is 2.7%. From the regression equation obtained, it can be seen that the interest spread variable is negative, which means that if the interest spread variable increases assuming the other variables are constant, it will be followed by a decrease. This is in accordance with the research conducted by Afzal and Mirza (2012) one of the financial stability measurement tools is the interest rate spread which can show the level of efficiency or banking performance in a country. The higher the interest rate spread, the more inefficient the performance of the banking system is, and the negative effect it will have on the ROA obtained by a bank.

4. The influence of *fee based income ratio* variable towards *profitability*

Based on the regression equation, it can be seen that the fee-based income ratio has a significant effect on bank profitability, which means that if the fee-based income ratio increases assuming the other variables are constant, it will be followed by an increase of 0.01435. Meanwhile, the effect of the other independent variables plus the interest spread on the return on assets (ROA) increased to 0.165 (additional data description table) so that the additional effect was 78.16%. From the regression equation obtained, it can be seen that the variable fee-based income ratio is negative, which means that if the variable fee-based

DOI

income ratio increases assuming the other variables are constant, it will be followed by a decrease. This is in accordance with the research results of Rian Hidayat (2017), testing the hypothesis simultaneously, it is concluded that fee-based income consists of the net difference in the fair value of credit sales, the net difference in spot and derivative transactions and the difference in net dividends, equity participation, commissions, fees, fees and administration have a significant effect on profitability. From the partial hypothesis test, it is found that fee-based income which consists of the net difference in fair value from credit sales, the difference in net transactions and the difference in net dividends has a significant effect on profitability.

5. The influence of *inefficiency internal ratio* variable towards profitability

Based on the regression equation, it can be seen that the internal inefficiency ratio has a significant effect on bank profitability, which means that if the internal inefficiency ratio increases assuming the other variables are constant, it will be followed by an increase of 0.03507. Meanwhile, the effect of the other 3 (three) independent variables plus the internal inefficiency ratio on return on assets (ROA) increased to 0.750 (table description of additional data) so that the additional effect of the internal inefficiency ratio was 56.30%. From the regression equation obtained, it can be seen that the internal efficiency ratio variable is positive, which means that if the internal efficiency ratio variable increases assuming the other variables are constant, it will be followed by an increase. This is in accordance with Defri's research (2012) which states that the internal inefficiency ratio has a significant effect on return on assets, which investors consider as a material consideration for determining their investment strategy by paying attention to the profitability of a company.

IV. Conclusions And Advices

Conclusions

Factors that influence profitability (*return on assets*) are:

1. Banking ratio, namely the ability of the bank to extend credit from all funds that have been collected by the bank.
2. The weighted average interest rate on funds is the average interest expense paid for every rupiah of public funds managed by the bank. The interest rate on funds is influenced by 2 things, namely the interest rate on total income, the level of total interest expense for each type of funding source and the portfolio of the various types of funds.
- 3.. Interest spread, namely the excess of the credit interest rate over the fund interest rate. The level of interest spread is influenced by the structure of the bank's burden, namely the interest rate on funds, the target fee-based income ratio, the ratio of expenses other than interest to total income, the level of total burden on banks to manage their assets.
4. Fee-based income ratio, namely the amount of income other than interest compared to total income as a whole. It turns out that the fee-based income ratio has a negative effect on the return on assets, meaning that an increase in the fee-based income ratio will cause a decrease in the return on assets or vice versa, even though the fee-based income ratio directly has a positive effect on the return on assets. This happens because of the control of other independent variables.
5. Inefficiency internal ratio, namely the bank's ability to control other expenses to generate income

DOI

other than interest which is reflected by the amount of other expenses that have not been covered (covered) by income other than interest.

6. The dominant variable; Based on the direct effect of each independent variable on return on assets through a simple regression equation, the most dominant variable is the interest rate on funds, followed by the fee-based income ratio, inefficiency ratio, interest ratio and banking ratio.

Advices

Based on the results of the research, the authors try to provide the following advices:

1. Banks need to create and develop various products other than interest (fee-based income) in order to increase return on assets and reduce risk due to weaknesses in the profitability structure, asset structure and capital structure.
2. The need for banks to develop various ways to reduce the inefficiency innovation ratio or create various products with a lower burden level. This suggestion is in line with the fact that the amount of credit is sensitive to the lending rate. And the credit interest rate is influenced by the fund interest rate.

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