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Determinant of Financial Performance on Indonesian Banks through Return on Assets

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Abstracts: Financial banking performance that needs the more attention is how far it affects to return on assets in the contribution to the benefit of banking. This study aims to find out whether the return on assets in Indonesian banks is influenced by cash and loan deposits in performing their business activities so it has the impact to the level of probability or not, especially on return on assets. The data used in this study is secondary data, it use 2011-2015 financial reports from 10 banks in Indonesia that listed on the Indonesian Stock Exchange. This study used multipleregression as data analysis method in its discussion. Based on the analysis and discussion conducted, it is known that the return on assets is positively and significantly influence it, but not affected by loan deposit on the return on assets. In addition, it was found that Cash ratio (CR) and loan deposit ratio did not have a positive influence on return on asset performance. From the analysis conducted, it can be concluded from this study that collectively the ratio of cash and loan to deposit ratio is not a significant determinant of the performance of return on assets in Indonesian Banks.

Keywords: Cash Ratio, Loan to Deposit Ratio and Return on Assets.

INTRODUCTION

Financial performance of Banking in Indonesia is currently showing a positive development although the global financial condition has not improved along with the debt crisis in Europe and the weakening of the United States economy does not have a significant impact on the sustainability of banks in the country. With the estimated growth rate reaching 5.5% in 2017 proclaimed by the government of Indonesia it is a good prospect for the banking community although the global economy still experiencing weakness. Bank as a financial institution currently controls more than 70% of financial transactions and plays an important role in the economic rotation of Indonesia.

Bank is a financial institution that collect funds from the public in the form of savings and channel them in the form of a credit to the people who need it, with this activity bank earns the income and at the same time it utilize the economic resources of community to contribute to the enhancement of country's economic growth rate. The norm of Bank Indonesia Number 11/25/PBI/2009 on risk management has the main objective to rescue the banking system in order to create a healthy banking sector and supported by strong capital and managed properly. One of the risks in banking is cash ratio that it should be in a good ratio. Cash ratio is the ratio between cash availability (such as current and saving accounts) and the other sources such as bank deposit. The lower value means cash ratio deposit growth far exceeds demand and savings that ultimately led to the higher interest costs (cost of funds). As a result, net interest margin will decline. The measuring devices to be used in measuring the level of profitability, return on assets and return on equity. In this study the profitability will be measured by using ROA.

Based on the identification data of profitability (ROA) conducted by the banking companies listed in Indonesian Stock Exchange on 2011 until 2015 shows that in 2011 profitability (ROA) banking company is 1.84. ROA of banking companies has risen to 2.02 in 2012. It decline to 1.88 in 2013, ROA is again declined to 1.47 in 2014. ROA of banking companies decrease to 0.97 in 2015. The data above shows that in 2011-2015 ROA of banking companies experiencing fluctuating due to various factors, one of them is the level of liquidity risk and credit risk.

This Study was conducted to analyze the various factors that influence ROA. Capital and ROA (Berger, 1987), credit ratio and profitability (Bashir and Hasan, 2003,) ratio of equity to assets and profitability. Bourke (1989) found some evidence of a positive relationship between liquid assets and profitability of banks to 90 banks in Europe, North America and Australia in 1972-1981. Julita (2010), and Prasetyo (2015) found the positive effect on ROA and LDR, where the higher the level of LDR shows the financial institution is in a liquid condition. Based on the above data, this study is intended to determine whether CR and LDR have an influence on financial performance or not, especially ROA profitability level.

LITERATURE REVIEW

Profitability is the most appropriate indicator to measure the performance of a bank (Harahap, 2002). In measuring the profitability of banking, it usually used Return On Equity (ROE) and Return On Asset (ROA). Return On Assets (ROA) is intended to see how far is the ability of banks or companies to earn a profit in their business activities while Return On Equity (ROE) is used only to measure how far the return from investments that have been instilled by stakeholders in the business. The loan is an asset originated from the creditor that utilized by the banking customer for the benefit of his business so that the bank earns the income from its interest. While the Loan to Deposit Ratio is the ability of bank to serve its customers when they need to withdraw their funds by relying on the credit given as a source of liquidity (Dendawijaya, 2005).

LDR shows the level of ability of banks in channeling third party funds collected by banks. Return On Assets (ROA) is generally used in calculating the level of efficiency and effectiveness of the company in generating profits by utilizing assets owned. Return On Asset (ROA) is the difference between profit before tax to total assets. The greater the Return On Asset (ROA) then the performance will be said the better, where the rate of return (return) is greater. If the Return On Assets (ROA) increases, it means the profitability of the company increases, thus it will have an impact on the level of profitability expected by shareholders.

Shahchera. M. (2012) in Al-Nimer (2013) found the evidence of non-linear relationship between profitability and liquid asset ownership. A substantial result of this study is that the business cycle has a significant effect on bank profits. The regulation coefficient is negative and significant. Therefore if the regulator minimizes the constraints imposed on the bank, the bank makes a profit. Zou (2014) Credit risk is one of the most significant risks that banks face, considering that granting credit is one of the main sources of income in commercial banks.

RESEARCH METHODS

Population and sample in this research is banking industry which listed in Indonesian Stock Exchange. The analysis model used is multiple regression analysis with the least squares equation (Ordinary Least Square). The analysis technique used to process the data in this research is descriptive analysis with numerical data presentation which includes the mean, standard deviation, maximum value and minimum value of research. Then do the classic assumptions test and hypothesis test using SPSS.

HYPOTHESIS

This study will examine the effect of third party funds CR and LDR on financial performance proved by the level of Return on Assets (ROA). In accordance with theoretical explanation, then there are three hypotheses developed in this study to find the influence of ROA.

ANALYSIS AND DISCUSSION

Tabel 1
Descriptive Statistics

	<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. Deviation</i>
Cash Ratio	50	.01	.36	.1326	.07102
Loan Deposit	50	1.08	7.28	3.4296	1.31020
ROA	50	-1.73	3.41	1.6366	.99624
Valid N (listwise)	50				

The results of the analysis of statistical description Table 1 show that the variable Return on Assets has a minimum value of -1.73, the maximum value of 3.41, the average value of 1.6366 and a standard deviation value of .99624. Variable Loan to Deposit Ratio (LDR) has a minimum value of 1.08, the maximum value of 7.28, the average value of 3.4296 and a standard deviation value of 1.31020. Variable Cash Ratio indicates that the minimum value of .01, the maximum value of .36, the average value of .1326 and a standard deviation value of .07102.

A normality test results show that the value of the Kolmogorov-Smirnov's ROA is 0.096 with significant value .200, this is normally distributed because it has a significant level above 0.05. LDR variables is .156 with have significant value of 0.04, this is normally distributed because it has a significant level above 0.05. CR variables have the value of 0.177 with KolmogrovSmirnov significant value of 0.00, this is not normally distributed because it has a significant level under 0.05.

Tabel 2
One-Sample Kolmogorov-Smirnov Test

		<i>Cash Ratio</i>	<i>Loan Deposit</i>	<i>Roa</i>
N	50	50	50	
Normal Parameters ^{a,b}	Mean	.1326	3.4296	1.6366
	Std. Deviation	.07102	1.31020	.99624
Most Extreme Differences	Absolute	.177	.156	.096
	Positive	.177	.156	.085
	Negative	-.113	-.118	-.096
Test Statistic		.177	.156	.096
Asymp. Sig. (2-tailed)		.000 ^c	.004 ^c	.200 ^{cd}

a. Test distribution is Normal.

Table 3
Test multicollinearity Coefficients^a

<i>Model</i>	<i>Collinearity Statistics</i>	
	<i>Tolerance</i>	<i>VIF</i>
CR	,914	1,094
LOAN DEPOSIT	,914	1,094

a. Dependent Variable: ROA

Based on the table above the multicollinearity indicate where VIF value for each variable research as follows:

1. VIF value for LDR variable of 1.094, so the LDR no multicollinearity symptoms.
2. VIF value for the variable CR amounted to 1.094, so the CR declared no symptoms multicollinearity.

Table 4
Test of Auto correlation Model Summary^b

<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>	<i>Durbin-Watson</i>
1	.339 ^a	.115	.077	.95699	.931

a. Predictors: (Constant), LOAN DEPOSIT, CASH RATIO

b. Dependent Variable: ROA

The test results in Table 4 shows that the value durbin watson 0.931. The value of DW will be compared with the table using a 5% confidence level with a sample size of 50, and after the transformation of the data and the sheer number of variables (K) = 3. So from the table in the DW can value 0.931 dl and du 1.69. because dl < d < du, namely 0.93 < 1.69, it can be concluded that those models with no symptoms of auto correlation

Table 5
Analysis of Results of Multiple Regression Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.894	.537		5.388	.000
	CASH RATIO	-4.224	2.014	-.301	-2.098	.041
	LOAN DEPOSIT	-.203	.109	-.267	-1.863	.069

Dependent Variable: ROA

Based on the table above it can be composed of multiple linear regression equation: $ROA = 2.894 - 4.224CR - .203LDR + E$, Multiple regression equation above shows that:

The coefficient of Loan to Deposit Ratio is equal to -.203. Negative coefficient values indicate that the Loan to Deposit Ratio has the negative effect on ROA banks listed on the Indonesian Stock Exchange 2011-2015. Coefficient Cash Ratio is equal to -4.224. Negative coefficient values indicate that the Capital Adequacy Ratio has the negative effect on ROA banks listed on the Indonesian Stock Exchange 2011-2015. The explanation above shows that all independent variables did not affect the dependent variable.

Table 6
Test of coefficient of determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.339 ^a	.115	.077	.95699

a. Predictors: (Constant), LOAN DEPOSIT, CASH RATIO

b. Dependent Variable: ROA

Based on the test results in the table above can be explained that terminating the coefficient obtained by the coefficient value R square is .077. It shows that the ROA can be explained by the variables CR and LDR by 7.7% while the remaining 92.3% influenced by the other factors.

Table 7
Partial of t test Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.894	.537		5.388	.000
	CASH RATIO	-4.224	2.014	-.301	-2.098	.041
	LOAN DEPOSIT	-.203	.109	-.267	-1.863	.069

a. Dependent Variable: ROA

Based on table 7 the effect of each LDR and CR to ROA as follows: Variable LDR has not significant effect on ROA because the significant value is more than 0.05 but Variable CR has a significant affect 0.41 of the ROA for the level of significant more than >0.05.

DISCUSSION

LDR influence on ROA

Based on the calculation results of partial test obtained by value t arithmetic amounted to -1.863, regression coefficient of -.203 and the significant value of 0.69 is more than 0.05, it means that LDR has not a significant effect on ROA. The results of this study demonstrate that the ability of banks during the years 2011-2015 in giving a loan from the third parties to the creditors has a negative effect to the bank's profit improvement and significant. Therefore, the higher the ratio gives an indication of the high ability of the bank's liquidity, it is a result of the great amount of funds required to finance the loan.

LDR which has a negative effect on ROA, indicates that the amount of credit is not supported by credit quality. Poor credit quality will increase the risk, especially when giving the loans was not done carefully and the expansion in lending is less controllable, so the bank will bear greater risk as well. While the results of study show that is no significant between LDR with ROA, it is due to the addition of capital from the owners in the form of fresh money to anticipate the scale of business expansion in the form of credits or loans. In fact, the bank has not been optimal in lending until now. Where the third party's fund in public deposit forms used by bank to buy SBI than giving credit to the public. Or the other causes due to the movement of data or LDR fluctuation on each banking company in each year. There is a banking company that has the low LDR value and banking companies that have the high LDR value leads to the high LDR gap among banking companies listed on the Stock Exchange each year.

The results of this study support the results of Prasetyo et.al (2015) which state that the LDR significant positive effect on ROA. While the research conducted by Lestari (2014) and Paramitha (2014) which states that the LDR has the significant positive effect is not supported by this study. F test basically indicates whether all the independent variables included in the model have influence together on the dependent variable or not. The results of this test are shown in Table 8.

Table 8
ANOVA^a (F test)

<i>Model</i>	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
1 Regression	5.588	2	2.794	3.051	.057 ^b
Residual	43.044	47	.916		
Total	48.632	49			

a. Dependent Variable: ROA

b. Predictors: (Constant), LOAN DEPOSIT, CASH RATIO

Result of the research conducted by regression analysis showed that the independent variables have a significant effect on the dependent variable together. This statement can be proved from the calculated F

value of 3.051 with F table 3.20 so that $F_{count} > F_{table}$ ($3.051 > 3.20$) with the value (sig) of 0.57, because sig is bigger than 0.05, then the model regression can be used to predict the ROA or it can be said that the LDR and CR together have the positive effect and have no significant impact on ROA. So the hypothesis that LDR and CR together have not significant effect on ROA is not acceptable.

CR influence on ROA

The calculation result of the partial test between variables CR with ROA obtained: t value of -2.098, regression coefficient of -4.224 and the significant value of .041 was higher than 0.005, meaning that the CR had a positive effect and significant on ROA. So the hypothesis that the ratio of CR was positive and had significant effect on ROA was acceptable. CR (Cash Ratio) is the ratio to measure the availability of cash to pay short-term bank debt. The higher the CR, the better the bank's ability to pay its short-term debt. The adequacy of bank cash availability reflects the ability of banks, due to the availability of physical cash. Bank management is free in expanding its business to earn profits and to maximize short-term debt payments in a timely manner, so that it makea sufficient funds into profitable investment activities.

The results of this study showed that the greater the CR then the greater the obtained bank ROA, the larger the CR, the higher the ability of the banks cash in reducing the risk of any losses incurred. With the increase in income will affect the bank's improved financial performance. The results of this study also supports previous research on putri et.al (2013) and Byoman (2012) and does not endorse research conducted by Bhunia, Bhagi (2012), which states that the CR has a significant negative effect to ROA.

LDR and CR influence on ROA

Result of research conducted by regression analysis showed that the independent variables have a significant effect on the dependent variable. This statement can be proved from the calculated F value of 3.051 to 3.20 F table so that $F_{count} > F_{table}$ ($3.051 > 3.20$) with the value of significant (sig) 0.57, because sig is bigger than 0.05, so the model regression can be used to predict the ROA or it can be said that the LDR and CR have no significant impact on ROA. So the hypothesis LDR and CR have a significant effect on ROA is unacceptable. The credit distribution and the availability of cash in this study have not influence to ROA. This proves that each independent variable has no influence on both effect on an increase or decrease in value.

CONCLUTION AND IMPLICATIONS

Conclusion

1. Loan to deposit ratio (LDR) has a negative and insignificant effect on Return on Assets (ROA). It means that although there are many third party funds that can be collected by banks, it have no effect on bank performance (ROA).
2. Cash Ratio (CR) has a positive and significant effect on Return on Assets. It means that the higher the cash ratio of the bank, it will cause the bank's performance (ROA) to be better.
3. The result of regression analysis shows that the CR and LDR variables have no significant effect on ROA. It means there is no effect on bank performance when LDR and CR are combined against bank ROA. Whereas the higher the performance of the bank will be the better the ROA.

Implication

The results of this study provide information that Cash Ratio has a significant effect on bank performance (ROA). While the Loan to Deposit Ratio (LDR), statistically has no significant effect on bank performance (ROA). The managerial implication that Cash Ratio shows a positive influence and can give rise to bank financial performance but unlike Loan deposit Ratio (LDR) it shows no effect to bank's financial performance (ROA). The results of this study are not in accordance with the concept and logic of bank operations, where the more funds from third parties can be collected from the community, the greater the opportunity for banks to channel funds to the public and get a return from the use of these funds.

Limitation

This research only takes the variable CR and LDR only, then the further research should be done by adding the other variables that will be able to give the more effect so that the research results will be more known its influence in the future.

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