FINANCIAL RATIO ANALYSIS ON BANKING FINANCIAL PERFORMANCE LISTED IN THE INDONESIA STOCK EXCHANGE OVER THE PERIOD OF 2009 TO 2013

Abstract

Bank is a financial institution that collects public fund and distribute the fund back to the community in the form of credit and another in order to improve the lives of many people. A Bank also has an important role in economy by serving as an intermediary (financial intermediary). This study aims to analyze the influence of Capital Adequacy Ratio (CAR), Non Performing Loan (NPL), ROA, Net Interest Margin (NIM), Loan to Deposit Ratio (LDR) on Return on Assets (ROA) in commercial banking during the period of 2009- 2013. The results show that, financial ratios of the Capital Adequacy Ratio (CAR), Non Performing Loan (NPL), ROA, Net Interest Margin (NIM), and Loan to Deposit ratio (LDR) had no significant effect either simultaneously nor partially on the Return on Assets (ROA). This is due to bank's good capital ability to manage optimum profitability.

Keywords: *CAR, NPL, OEOI, NIM, LDR and ROA*

1. INTRODUCTION

To realize healthy, strong and efficient banking, evaluation is needed by reviewing banking health level. A bank financial health can be measured by several indicators. One of the main indicator used for the evaluation is its financial report. Bank health evaluation uses several financial ratios that can be calculated based on its financial report. Financial report analysis results will help analysts interpret several key relationships and tendencies to be used in considering company's success potential in the future. (Almilia and Herdiningtyas, 2005).

Profitability is the most suitable indicator to measure bank performance (Syofyan, 2002). Profitability measurement used are *Return on Equity* (ROE) for companies in general and *Return On Asset* (ROA) in banking. Both ROE and ROA can be used to measure financial performance in banking industry. *Return on Asset* (ROA) is focused on company capability in *earning* during its operational, while *Return on Equity* (ROE) only calculating the *return* earned from owners investment in the business (Siamat, 2002). In this study, ROA is used as banking performance measurement. This research aims to analyse the influence of *Capital Adequacy Ratio* (CAR), *Non Performing Loan* (NPL), OEOI, *Net Interest Margin* (NIM), and *Loan to Deposit Ratio* (LDR) on *Return On Asset* (ROA), to analyse *Non Performing Loan* (NPL) influence on *Return On Asset* (ROA).

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Return on Assets (ROA)

Return on Assets (ROA) is the ratio to measure bank management ability in earning profitability and managing bank efficiency level in general. Larger ratio shows healthier and better bank profitability level (Mahrinasari, 2003). According to Bank of Indonesia, *Return On Asset* (ROA) is the ratio of profit before tax and average total assets in one period. Larger *Return On Asset* (ROA) shows better company performance, because it generates bigger return. Therefore, this research utilizes *Return On Asset* (ROA) as the measurement indicator of banking institution financial performance.

Return on Asset (ROA) is chosen as measurement indicator of banking financial performance because *Return on Asset* (ROA) measures company effectiveness in generating profits by utilizing its assets. *Return on Asset* (ROA) is the ratio of profits before tax to total assets. Higher *Return on Asset* shows better financial performance, because of the higher return level. If *Return on Asset* increased, company profitability is as well increased,

which leads to higher profitability for shareholders (Husnan, 1998).

***Capital Adequacy Ratio* (CAR)**

Capital Adequacy shows bank capability in maintaining capital at sufficient level and bank management ability in identifying, supervising and controlling emerging risks that might be affecting the amount of bank capital (Sufa, 2008). *Capital Adequacy Ratio* (CAR) measures capital strength to avoid loss in credit activities and securities trading.

Capital Adequacy Ratio (CAR) according to Achmad and Kusumo (2003) is capital ratio that shows bank ability in providing fund to business development and to deal with possibility of losing in its activities. Higher ratio shows better capital position. According to Pakfeb 1991, banking is required to provide minimum capital known as CAR (Capital Adequacy Ratio) that is measured by certain percentage to Risk-Weighted Asset (RWA). In compliance with *Bank of International Settlements* (BIS) standard, every bank in Indonesia is required to provide a minimum capital of 8% from Risk-Weighted Asset (Kuncoro and Suhardjono, 2002).

Non Performing Loan (NPL)

The finance ratio used as a proxy to credit risk value is *Non Performing Loan* (NPL) ratio. This ratio shows bank managerial ability to manage bad credit the bank issued. *Non Performing Loan* (NPL) reflects credit risk, the lower *Non Performing Loan* (NPL), the lower credit risk carried by a bank. In issuing credit, bank has to analyse debtor ability in paying back. As the credit has been issued, the bank is to monitor the credit use and debtor ability and compliance to oblige. The bank monitors, assesses, and holds the collateral to minimize credit risks (Ali, 2004).

OEOI

Operational Expense to Operational Income (OEOI) ratio or Efficiency Ratio measures bank management ability to control the operational expense over operational income. The smaller the ratio, the more efficient the operational expenses spent by the bank (Almilia and Herdiningtyas, 2005). The bank success is based on quantitative evaluation over bank profitability, measured by the ratio of operational expenses to operational income ratio (Kuncoro and Suhardjono, 2002). According to Dendawijaya (2003) operational cost ratio is being used to measure bank efficiency and ability in doing its operational activities.

According to Bank of Indonesia (SE. Intern BI, 2004), operational efficiency is measured by comparing total operational expenses with total operational income referred to as OEOI. This OEOI ratio aims to measure the capability of operational income in covering operational expenses. Increasing ratio shows the bank lacks in ability to depress operational expenses and to increase operational income which would be causing loss due to the lack of efficiency in managing the business. Bank of Indonesia sets OEOI best rate to be below 90%'. If the ratio is higher than 90% or close to 100%, then the bank is categorized as not being efficient in doing its businesses.

Net Interest Margin (NIM)

Net Interest Margin (NIM) is important to evaluate a bank ability in managing interest rate risk. When the interest rate is changing, bank interest income and interest cost will change. For example when interest rate increased, interest income and interest cost will follow suite because the bank assets and liability will be valued at a higher rate (Koch and Scott, 2000).

Net Interest Margin (NIM) is a ratio that shows the bank ability to manage its productive assets in generating nett interest income. Nett interest income is calculated through deducing interest income with interest expenses. Higher ratio means an increase of interest income on productive assets managed by the bank, hence minimizing the possibility of unhealthy business (Almilia dan Herdiningtyas, 2005).

Loan to Deposit Ratio (LDR)

Loan to Deposit Ratio (LDR) shows the bank ratio of credit volume to deposit volume (Muljono, 1999). *Loan to Deposit Ratio* (LDR) assesses bank liquidity by means of dividing total credit by total fund. *Loan to Deposit Ratio*

(LDR) is also a ratio that shows bank ability in providing fund to its debtors either by its own capital or by the fund collected from customers (Almilia and Herdiningtyas, 2005). *Loan to Deposit Ratio* (LDR) is set to a maximum of 110% according to Bank of Indonesia (Achmad dan Kusuno, 2003).

According to Ali (2006), liquidation regulation mainly aims to encourage banks to do its legal obligations accordingly. Liquidity is assessed with consideration that most bank assets are not liquid with shorter-term source of fund. Among the liquidity indicators are the amount of secondary reserve for daily liquidity needs, dependent concentration ratio from larger fund that is relatively less stable, and third-parties income source distribution with healthy cost and stability. According to Bank of Indonesia, liquidity assessment shows bank ability to manage liquidity rate on sufficient level for timely fulfillment of its legal obligation and other needs. Beside, a bank should also be able to guarantee efficient management of activities, its ability to depress high liquidity management cost and that the bank can at any time liquidates its assets quickly with minimal loss (SE. Intern BI, 2004).

Previous Empirical Studies

1. Esther Novelina Hutagalung, 2013

The study shows that CAR has unsignificant influence on ROA because banking capital ability over the period of 2007-2011 was generally good, hence NPL optimal profitability on this study statistically have significant influence on ROA. Higher NPL ratio means lower value of ROA ratio. This study concluded that banks in the period of 2007-2011 has well managed their function as intermediary organization and in managing the quality of their productive assets.

NIM has significant influence on ROA. This means that bank ability to generate profit from interest is influencing its financial performance. NIM earning has been good, hence bank financial performance is also well managed.

OEOI has significant influence on ROA. Higher OEOI ratio means the bank operational activities are inefficient, and vice versa, lower OEOI ratio shows efficient bank activities. Banking activities in the period of 2007-2011 is generally efficient, hence generated bigger profit and this has increased bank financial performance.

LDR has unsignificant influence on ROA. This shows that bank ability to deliver its obligation on third-parties fund is good, but is not optimum. The more optimum liquidity rate of the bank means bigger third-parties fund being distributed in credits. However, the quality of productive assets and NIM earnings were well managed and banking had efficient activities, therefore bank financial performance is well managed.

2. A.A Yogi Prasanjaya and I Wayan Ramantha, 2013

This study reveals that F test result shows that CAR, OEOI, LDR ratio and company size/scale have significant influence on profitability. While the t-test result shows that LDR and OEOI have significant influence on profitability, yet CAR and company size do not have significant influence on profitability.

3. Arditya Prayudi,

The study shows that independent variables (CAR, NPL, OEOI, ROA, and NIM) with F test are simultaneously influencing LDR. Partial t-test results demonstrate that CAR, NLP and OEOI variables do not influence LDR with significancy level at 0.812, 0.209 and 0.121. *Adjusted R Square* value at 0.255 shows that LDR can be explained by research variables at 25.5%, while the remaining is explained by another factors.

4. Enggar Koesoema Sari and Imam Ghozali,

This study shows that CAR, NPL, OEOI, and LDR variables have significant negative correlation with ROA. NIM has significant positive influence on ROA and PPAP has positive influence but not significant on ROA.

Hypothesis

1. t-test for *Capital Adequacy Ratio* (CAR) variable

Ho : $b_1 = 0$. *Capital Adequacy Ratio* (CAR) does not have partial significant influence on *Return On Asset* (ROA).

Ha : $b_1 \neq 0$. *Capital Adequacy Ratio* (CAR) has significant influence.

2. t-test for *Non Performing Loan* (NPL) variable

Ho : $b_2 = 0$. *Non Performing Loan* (NPL) does not have partial significant influence on *Return On Asset* (ROA).

Ha : $b_2 \neq 0$. *Non Performing Loan* (NPL) has significant influence on *Return On Asset* (ROA).

3. t-test for OEOI variable

Ho : $b_3 = 0$. OEOI does not have partial significant influence on *Return On Asset* (ROA).

Ha : $b_3 \neq 0$. OEOI has partial significant influence on *Return On Asset* (ROA).

4. t-test for *Net Interest Margin* (NIM) variable

Ho : $b_4 = 0$. *Net Interest Margin* (NIM) does not have partial significant influence on *Return On Asset* (ROA).

Ha : $b_4 \neq 0$ *Net Interest Margin* (NIM) has significant influence on *Return On Asset* (ROA).

5. t-test for *Loan to Deposit Ratio* (LDR) variable

Ho : $b_5 = 0$. *Loan to Deposit Ratio* (LDR) does not have partial significant influence on ROA..

Ha : $b_5 \neq 0$ *Loan to Deposit Ratio* (LDR) has significant influence on *Return On Asset* (ROA).

3. RESEARCH METHOD

Operationalized Variables

The variables observed in this study are:

1. Dependent Variable
   Return On Asset (Y)
2. Independent Variables
   X1 : CAR
   X2 : NPL
   X3 : OEOI
   X4 : NIM

Table 1 . Operasionalized Research Variables

No	Varia ble	Equation	Scale	Data Type
1.	*Capital Adequacy Ratio* (CAR)	$CAR = \frac{Modal}{ATMR}$	Rasio	Sekunder
2.	*Non Performing Loan* (NPL)	$NPL = \frac{Total\ Kredit\ bermasalah}{Total\ Kredit}$	Rasio	Sekunder
3.	OEOI	$BOPO = \frac{Total\ Beban\ Operasional}{Total\ Pendapatan\ Operasional}$	Rasio	Sekunder
4.	*Net Interest Margin* (NIM)	$NIM = \frac{Pendapatan\ Bunga\ Bersih}{Rata - rata\ Aktiva\ Produktif}$	Rasio	Sekunder
5.	*Loan to Deposit Ratio* (LDR)	$LDR = \frac{Total\ Kredit}{Total\ Dana\ Pihak\ Ketiga}$	Rasio	Sekunder
6.	*Ret urn On Asset* (ROA)	$ROA = \frac{Laba\ Sebelum\ Pajak}{Total\ Asset}$	Rasio	Sekunder

Source and Methods of Data Collection

The data being used in this research is quantitative data from certain period of observation represented in numbers and shows the value of variables being represented.

The type of data being used is secondary data that has been collected and processed before. The data for *Capital Adequacy Ratio* (CAR), *NonPerforming Loan* (NPL), OEOI, *Net Interest Margin* (NIM), *Loan to Deposit Ratio* (LDR), and *Return On Asset* (ROA) were collected by directly citing The Three Monthly Financial Report in Indonesia's Banking Directory from Bank of Indonesia listed in Jakarta Stock Exchange in the period of 2009 to 2013. Data collection method in this research is *purposive sampling*, with criteria as follow:

1. Conventional commercial bank operating in Indonesia in 2009-2013 that provides Financial Reports within the observation period.
2. Within the research period, the banks periodically issued annual financial reports from the year of 2009-2013 and met the data comprehensiveness for the observation period.

Subject population of this research is 120 commercial banks (conventional bank). The total sample used in this research is 21 go-public commercial banks

Data Collection Techniques

In obtaining the data needed for this study, *library research* is conducted by reading and studying several literatures such as books, journals and another sources related to research subject.

Data Analysis and Hypothesis Testing Techniques

a. Data Analysis Techniques

The analysis technique used to test the hypothesis is Multiple Linear Regression Analysis. Regression analysis is used to ascertain the influence of independent variables *Capital Adequacy Ratio* (CAR), *Non Performing Loan* (NPL), OEOI, *Net Interest Margin* (NIM), and *Loan to Deposit Ratio* (LDR) on *Return On Asset* (ROA). The equation model is:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + e$$

Explanation:

Y	=	*Return On Asset* (ROA)
b_1, b_2, b_3, b_4, b_5	=	Regression coefficient X_2, X_3, X_4, X_5
X_1	=	*Capital Adequacy Ratio* (CAR)
X_2	=	*Non Performing Loan* (NPL)
X_3	=	OEOI
X_4	=	*Net Interest Margin* (NIM)
X_5	=	*Loan to Deposit Ratio* (LDR)
a	=	Constant
e	=	Residual regression equation

4. RESULTS AND DISCUSSION

Statistical Description of Research Variables

In accordance to the statistical analysis description, the sample characteristics of this study will be represented in the table below which comprises total sample, sample mean, maximum value, minimum value and standard deviation for dependent variables and independent variables.

Table 4.2.

Descriptive Statistic of Research Variables

Descriptive Statistic s

	N	Minimum	Maximum	Mean	Std. Deviation
CAR	140	3,29	46,79	17,1945	6,61046
NPL	140	,0070	128,5000	6,289979	22,5937098
OEOI	140	54,13	178,41	84,5026	18,65340
NIM	140	,76	16,64	5,7384	2,03789
LDR	140	8,110	113,300	78,38644	15,401719
ROA	140	-12,90	90,10	4,8305	16,40303
Valid N (listwise)	140				

Source: processed data

The table above shows that the number of sample used in this study is 140 data sample obtained from Financial Report of Indonesia's Banking listed in Indonesia Stock Exchange over the period of 2009 to 2013.

The lowest ROA ratio is -12.90% by Bank Pundi Indonesia in the year 2010 and the highest ROA ratio is 90.10% achieved by Bank Central Asia in the year 2009. The average ROA ratio is 4.8305%, showing that during the research period the banking profit rate falls in sufficient category according to Bank of Indonesia criteria. The standard deviation at 16.40303, indicates relatively high data deviation with higher value than the mean value at 4.8305. This indicates the ROA variable is not good.

The average CAR ratio is 17.1945% with the lowest data of 3.29% is from Bank Swadesi in the year of 2009 and the highest at 46.79% is from Bank Capital Indonesia in the year of 2009. This indicates that statistically, the CAR ratio recorded in BEI (Indonesia Stock Exchange) qualified for Bank of Indonesia's minimum standard of 8%. While the standard deviation at 6.61046, is lower compared to the 17.1945% mean value. Hence, the data deviation on CAR is still good.

Non Performing Loan (NPL) has the highest value at 128.5000% and the lowest is 0.0070%. Statistically during research period, the *Non Performing Loan* (NPL) banking rate recorded in Indonesia Stock Exchange was excessing Bank of Indonesia's maximum standard of 5%. The mean of *Non Performing Loan* (NPL) is 6.289979% with standard deviation value of 22.5937098. This indicates that the data used in *Non Performing Loan* (NPL) variable has a large spread because its standard deviation is larger than the mean value, hence the data deviation of *Non Performing Loan* (NPL) variable is not good. This indicates several *outlier* (extreme data) on *Non Performing Loan* (NPL) data in this research.

The highest value of OEOI is 178.41% and the lowest is 54.13%. Statistically during the research period OEOI banking rate recorded in Indonesia Stock Exchange is inefficient with average OEOI at above 80%. The *mean* of OEOI is at 84.5026% with standard deviation value at 18.65340. This indicates that the data used in the OEOI variable has a narrow spread because the standard deviation is smaller than the mean value, hence the data deviation for OEOI variable is good.

Net Interest Margin (NIM) has the highest value at 16.64% and the lowest at 0.76%. Statistically the *Net Interest Margin* (NIM) banking rate recorded in Indonesia Stock Exchange during research period does not qualify for Bank Indonesia's minimum standard of 6%. The *mean* of *Net Interest Margin* (NIM) is 5.7384% with standard deviation value of 2.03789. This shows that the data used in *Net Interest Margin* (NIM) variable has a narrow spread because of the smaller deviation standard than its mean, hence the data deviation of *Net Interest Margin* (NIM) variable is said to be well.

Loan to Deposit Ratio (LDR) has the highest value at 113.30% by Bank Kesawan of the year 2013 and the lowest at 8.110%. Statisically during the research period the rate of banking *Loan to Deposit Ratio* (LDR) recorded in Indonesia Stock Exchange did not meet Bank of Indonesia's standard at 80%-110%. The *mean* of *Loan to Deposit Ratio* (LDR) is 78.38% with standard deviation

value of 15.401719. This shows that the data used in *Loan to Deposit Ratio* (LDR) variable has large spread because the standard deviaton is larger than the mean, hence the data deviation in *Loan to Deposit Ratio* (LDR) variable is said to be not well. This shows that *Loan to Deposit Ratio* (LDR) data in this research have several outlier (too extreme data). The outlier data will cause abnormality in data distribution. One of the ways to fix this is by doing *logarithmic normal transformation*. (ln).

Tabel 4.3.

Research Variable Description after Logarithmic Normal (LN)

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
CAR	105	1,19	3,85	2,79	,30
NPL	105	,02	2,82	,71	,53
BOPO	105	3,99	5,18	4,38	,16
NIM	105	1,27	2,38	1,75	,25
LDR	105	2,09	4,69	4,36	,29
ROA	105	,11	3,55	1,63	,80
Valid N (listwise)	105				

Sumber: data yang diolah

The above table shows research variables after *logarithmic normal* transformation. The standard deviation value for each variable is lower than the mean value. Out of 140 data used in this research, 105 proper data found to be processed further while the rest 35 data is classified as *outlier*.

Normality Test

Table 4.4

Data Normality Test Result

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		105
Normal Parameters[a,b]	Mean	,0000000
	Std. Deviation	,78359165
Most Extreme Differences	Absolute	,075
	Positive	,075
	Negative	-,051
Kolmogorov-Smirnov Z		,773
Asymp. Sig. (2-tailed)		,589

a. Test distribution is Normal.

b. Calculated from data.

The table above shows data normality test results using Kolmogorov Smirnov statistical method. From the data respresented in the table, significancy value obtained by residual variable is 0.589 > 0.05, showing normal distribution of residual data, hence the data normality assumption was met.

Multicollinearity Test

Table 4.5

Multicollinearity Test

Coefficients[a]

Model		Collinearity Statistics	
		Tolerance	VIF
1	CAR	,832	1,202
	NPL	,946	1,057
	BOPO	,719	1,391
	NIM	,730	1,370
	LDR	,872	1,146

a. Dependent Variable: ROA

The multicollinearity test result above shows tolerance value obtained by each independent variable is > 0.1 and *Variance Inflation Factor* (VIF) of each is < 10. The result shows that all five independent variables being tested do not correlate one another and it meets multicollinearity assumption.

Autocorrelation Test

Autocorrelation test aims to examine if there is any correlation between residual in period t with residual in period t-1 in a linear regression model, this autocorrelation arises in time-series data. To detect if there's any autocorrelation problem, Breusch-*Godfrey* (BG) test can be used by regressing residual variable Ut. with criterion as follow:

- If the significance level of residual variable < 0.05, there is autocorrelation problem.
- If the significance level of residual variable > 0.05, there is no autocorrelation problem.

Table 4.6

Autocorrelation Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	,964	3,303		,292	,771
	CAR	,008	,287	,003	,028	,978
	NPL	,045	,156	,030	,287	,775
	BOPO	-,242	,624	-,049	-,389	,698
	NIM	,082	,378	,026	,217	,829
	LDR	-,060	,298	-,022	-,201	,841
	RES_2	,249	,207	,141	1,198	,234

a. Dependent Variable: Unstandardized Residual

The table above explains the autocorrelation test result using Breusch-*Godfrey* (BG). The data represented shows that the significance level for residual variable is 0.234. This is a higher number than 0.05, showing that there is no autocorrelation problem in the data used.

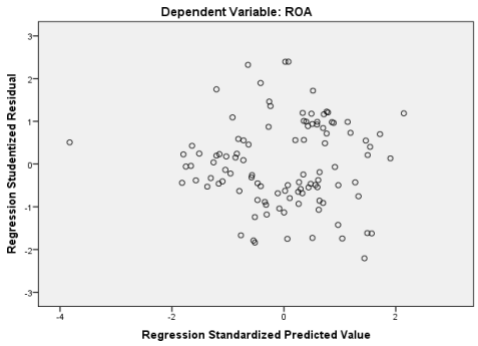
Heteroscedacticity Test

Heteroscedacticity test aims to examine if there is any variance difference between residuals in regression model. An ideal regression model shows homoscedacticity instead of heteroscedacticity. To detect any sign of heteroscedacticity, *scatter plot* graphic method is utilized by considering these factors:

a. If there were any certain pattern, e.g. dots forming certain regular pattern, this indicates heteroskecacticity.
b. If there were no clear pattern, e.g. scattered dots above and below number 0 at Y axis, there is no heteroscedacticity.

Picture 4.2

Heteroskedacticity Test Result



The graphic above explains the heteroscedacticity result using *scatter plot* method. The obtained residual data value does not form any certain pattern and scattered above and below Y axis. This shows that residual variance in the data is homoscedactic. The four classic test assumptions above shows that no classic assumption is being violated, therefore the multiple regression analysis can be used.

Multiple Linear Regression Formula

To discover the financial ratio of *Capital Adequacy Ration* (CAR), *Non Performing Loan* (NPL), OEOI, *Net Interest Margin* (NPM) and *Loan to Deposit Ratio* (LDR) to financial performance measured by *Return On Asset* (ROA) of banking institution listed in Indonesia Stock Exchange in the period of 2009 – 2013, data processing results are as follow:

Table 4.7

Multiple Linear Regression Formula

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1,737	3,210		,541	,590
	CAR	-,161	,288	-,060	-,558	,578
	NPL	,077	,152	,052	,509	,612
	BOPO	-,101	,591	-,020	-,172	,864
	NIM	-,508	,373	-,157	-1,362	,176
	LDR	,372	,294	,134	1,264	,209

a. Dependent Variable: ROA

According to the table above, the multiple linear regression formulation is as follows:

$$Y = 1{,}737 - 0.161X_1 + 0.077X_2 - 0.101X_3 - 0.508X_4 + 0.372X_5$$

Based on the multiple linear regression formulation above, the correlation of each variable with *Return On Asset* (ROA) is as follow:

a. The constant 1.737 shows that the five independent variables, CAR, NPL, OEOI, NIM and LDR equal with 0 (zero) and does not change, hence *Return On Asset* (ROA) will be 1.737 percent.
b. *Capital Adequacy Ratio* (CAR) has negative regression coefficient value at -0.161. This means when *Capital Adequacy Ratio* (CAR) increases and the other variables are constant, then the *Return On Asset* (ROA) will decrease by -0.161 percent.
c. *Non Performing Loan* (NPL) has positive regression coefficient 0.077. This means if *Non Performing Loan* (NPL) increases one percent, while another independent variables are constant, the *Return On Asset* (ROA) will increase by 0.077 percent.
d. OEOI has negative regression coefficient -0.101. This means if OEOI increases one percent, while another independent variables are constant, the *Return On Asset* (ROA) will decrease by 0.101 percent.
e. *Net Interest Margin* (NIM) has negative regression coefficient value -0.508 percent. This means if the *Net Interest Margin* (NIM) increases one percent, while another independent variables are constant, the *Return On Asset* (ROA) will decrease by 0.508 percent.
f. *Loan to Deposit Ratio* (LDR) has positive regression coefficient value 0.372 percent. This means if the *Loan to Deposit Ratio* (LDR) increased for one percent, while another independent variables are constant, the *Return On Asset* (ROA) will increase by 0.372 percent.

Correlation Analysis

Correlation Analysis Result

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,188[a]	,035	-,013	,80314

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

b. Dependent Variable: ROA

According to the table above, the correlation coefficient value obtained between *Capital Adequacy Ration* (CAR), *Non Performing Loan* (NPL), OEOI, *Net Interest Margin* (NPM) and *Loan to Deposit Ratio* (LDR) with *Return On Asset* (ROA) on banking institution listed in Indonesia Stock Exchange in the period of 2009 – 2013 is 0.188. It has positive correlation value, indicating parallel relation between financial ratio and financial performance. Higher financial performance will be followed by higher *Return On Asset* (ROA) of banking

institution listed in Indonesia Stock Exchange in the period of 2009 – 2013.

Determination Coefficient Analysis

Analisis Koeofisien Determinasi

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,188[a]	,035	-,013	,80314

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

b. Dependent Variable: ROA

According to the table above, the determination coefficient value or *R-Square* obtained is 0.035. This indicates that the financial ratio consist of *Capital Adequacy Ratio* (CAR), *Non Performing Loan* (NPL), OEOI, *Net Interest Margin* (NPM) and *Loan to Deposit Ratio* (LDR) influencing the financial performance calculated by *Return On Asset* (ROA) on banking institution listed in Indonesia Stock Exchange in the period of 2009 – 2013 is at 3.5%. While the rest 96.5% were contributed by another variables not included in this study. To see how much each independent variable contributes to dependent variable, beta value is multipled with zero order value as follow:

Partial Determination Coefficient Analysis

Coefficients[a]

Model		Standardized Coefficients	Correlations
		Beta	Zero-order
1	CAR	-,060	-,024
	NPL	,052	,051
	BOPO	-,020	,064
	NIM	-,157	-,127
	LDR	,134	,093

a. Dependent Variable: ROA

In accordance with the output above, calculation is done as follow:

X_1 influence on Y = (-0.060) x (-0.024) = 0.001 or 0.1%

X_2 influence on Y = 0.052 x 0.051 = 0.003 or 0.3%

X_3 influence on Y = (-0.020) x 0.064 = -0.001 or -0.1%

X_4 influence on Y = (-0.157) x (-0.127) = 0.020 or 2,0%

X_5 influence on Y = 0.134 x 0.093 = 0.012 or 1,2%

The calculation above shows that out of the five variables, NIM (X_4) has the biggest influence on *Return On Asset* (ROA) by 2% contribution, followed by LDR (X_5) at 1,2%, NPL (X_2) at 0.3%, CAR (X_1) at0.1%, and the variable with least influence on ROA at -0.1% contribution is OEOI.

Partial Hypotesis Test CAR (X_1)

Partial Hypothesis Test X 1

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1,737	3,210		,541	,590
	CAR	-,161	,288	-,060	-,558	,578
	NPL	,077	,152	,052	,509	,612
	BOPO	-,101	,591	-,020	-,172	,864
	NIM	-,508	,373	-,157	-1,362	,176
	LDR	,372	,294	,134	1,264	,209

a. Dependent Variable: ROA

According to the table above, the t-value calculated from *Capital Adequacy Ratio* (CAR) variable is -0.558. This value will be compared with t-table value in t distribution table. With α=0.05, df=n-k-1=105-5-1= 99, the t-table value to test the two value is (-1,984 dan 1,984). The values above show that the t-distributions of *Capital Adequacy Ratio* (CAR) is -0.558, or between t-table value (-1.984 and 1.984). This fits the hypothesis test criteria that H_0 is accepted, and H_a is rejected. This means, partially *Capital Adequacy Ratio* (CAR) does not have significant influence to *Return On Asset* (ROA) on banking institution listed in Indonesia Stock Exchange in the period of 2009 – 2013.

Partial Hypotesis Test X_2 (NPL)

Partial Hypothesis Test X 2

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1,737	3,210		,541	,590
	CAR	-,161	,288	-,060	-,558	,578
	NPL	,077	,152	,052	,509	,612
	BOPO	-,101	,591	-,020	-,172	,864
	NIM	-,508	,373	-,157	-1,362	,176
	LDR	,372	,294	,134	1,264	,209

a. Dependent Variable: ROA

According to the table above, the t-value result of *Non Performing Loan* (NPL) is 0.509. This value will be compared to the t-table on t distribution table. Using α=0.05, df=n-k-1=105-5-1= 99, the t-table obtained for paired t-test is (-1.984 and 1.984). The t-value obtained by *Non Performing Loan* (NPL) is 0.509, or between t-table value (-1.984 and 1.984). This fits the hypothesis test criteria that H_0 is accepted, and H_a is rejected. That means partially, *Non Performing Loan* (NPL) does not have significant influence on *Return On Asset* (ROA) in banking institution listed in Indonesia Stock Exchange in the period of 2009-2013.

Partial Hypothesis Test X_3 (OEOI)

Partial Hypothesis Test X3

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1,737	3,210		,541	,590
	CAR	-,161	,288	-,060	-,558	,578
	NPL	,077	,152	,052	,509	,612
	BOPO	-,101	,591	-,020	-,172	,864
	NIM	-,508	,373	-,157	-1,362	,176
	LDR	,372	,294	,134	1,264	,209

a. Dependent Variable: ROA

According to the table above the t-test value of *Operation Expense to Operational Income* (OEOI) ratio is -0.172. This number will be compared to the t-table value on t distribution table. Using α=0.05, df=n-k-1=105-5-1= 99, the t-table value obtained for paired t-test is (-1.984 and 1.984). The above values show that t-test value of *Operational Expenses to Operational Income* (OEOI) ratio is at -0.172, or within t-table value (-1.984 and 1.984). This fits the hypothesis test criteria that H_0 is accepted, and H_a is rejected. That means partially, *Operational Expenses to Operational Income* (OEOI) ratio does not have significant influence on *Return On Asset* (ROA) in banking instutions listed in Indonesia Stock Exchange in the period of 2009 - 2013.

Partial Hypothesis Test X_4 (NIM)

Partial Hypothesis Test X 4

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1,737	3,210		,541	,590
	CAR	-,161	,288	-,060	-,558	,578
	NPL	,077	,152	,052	,509	,612
	BOPO	-,101	,591	-,020	-,172	,864
	NIM	-,508	,373	-,157	-1,362	,176
	LDR	,372	,294	,134	1,264	,209

a. Dependent Variable: ROA

According to the table above, the t-value for *Net Interest Margin* (NIM) variable is known to be -1.362. This value will be compared to the t-table on t distribution table. Using α=0.05, df=n-k-1=105-5-1= 99, the t-table value obtained for paired t-test is (-1.984 and 1.984). The values above show that t-test value of *Net Interest Margin* (NIM) is -1.362, or between t-table value (-1.984 and 1.984). This fits the hypothesis test critera that H_0 is accepted, and H_a is rejected. That means partially, *Net Interest Margin* (NIM) does not have significant influence on *Return On Asset* (ROA) in banking instutions listed in Indonesia Stock Exchange in the period of 2009 - 2013.

Partial Hypothesis Test X_5 (LDR)

Partial Hypothesis Test X 5

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1,737	3,210		,541	,590
	CAR	-,161	,288	-,060	-,558	,578
	NPL	,077	,152	,052	,509	,612
	BOPO	-,101	,591	-,020	-,172	,864
	NIM	-,508	,373	-,157	-1,362	,176
	LDR	,372	,294	,134	1,264	,209

a. Dependent Variable: ROA

According to the table above, the t-value for *Loan to Deposit Ratio* (LDR) variable is known to be 1.264. This value will be compared to the t-table on t distribution table. Using α=0.05, df=n-k-1=105-5-1= 99, the t-table value obtained for paired t-test is (-1.984 and 1.984). The values above show that t-test value of *Loan to Deposit Ratio* (LDR) is 1.264, or between t-table value (-1.984 and 1.984). This fits the hypothesis test critera that H_0 is accepted, and H_a is rejected. That means partially, *Loan to Deposit Ratio* (LDR) does not have significant influence on *Return On Asset* (ROA) in banking instutions listed in Indonesia Stock Exchange in the period of 2009 - 2013.

5. CONCLUSION

According to results of data analysis and elaborated theory on previous chapter, the author concludes:

a. Simultaneously, the financial ratio consist of *Capital Adequacy Ratio* (CAR), *Non Performing Loan* (NPL), OEOI ,*Net Interest Margin* (NIM), and *Loan to Deposit Ratio* (LDR) did not significantly influence the *Return On Asset* (ROA) of banking industry listed in Indonesia Stock Exchange in the period of 2009 – 2013 with influence contribution only as many as 3,5%, while the rest 96,5% is that of another variables not included in this study.
b. Partially, *Capital Adequacy Ratio* (CAR) did not significantly influence the *Return On Asset* (ROA) of banking industry listed in Indonesia Stock Exchange in the period of 2009 – 2013 by influence contribution only as high as 0.1%.
c. Partially, *Non Performing Loan* (NPL) did not significantly influence the *Return On Asset* (ROA) of banking industry listed in Indonesia Stock Exchange in the period of 2009 – 2013 with influence contribution only as high as 0.3%.
d. Partially, *Operational Expenses to Operational Income* (OEOI) ratio did not significantly influence the *Return On Asset*

(ROA) of banking industry listed in Indonesia Stock Exchange in the period of 2009 – 2013 with influence contribution only as high as 0.1%.

e. Partially, *Net Interest Margin* (NIM) did not significantly influence the *Return On Asset* (ROA) of banking industry listed in Indonesia Stock Exchange in the period of 2009 – 2013 with influence contribution only as high as 2%.
f. Partially, *Loan to Deposit Ratio* (LDR) did not significantly influence the *Return On Asset* (ROA) of banking industry listed in Indonesia Stock Exchange in the period of 2009 – 2013 with influence contribution only as high as 1.2%.

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