FINANCIAL PERFORMANCE OF BANKING INDUSTRY

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ABSTRACT

This research aimed to determine the financial performance of banking industry by found out the effect of Capital Adequacy Ratio (CAR), Debt to Equity Ratio (DER), Loan to Deposit Ratio (LDR), Non-Performing Loans (NPLs), on Return on Equity (ROE) in the banking industry on the Indonesia Stock Exchange in the 2011 - 2016 period, either partially dan simultaneous. This is a quantitative case study research, secondary data obtained by documentation method. The population of this study are companies included in the banking industry on the Indonesia Stock Exchange in 2011 to 2016 period. Samples of the research were 41 companies, 28 banks match with the criterias: they issued financial statements periodically during the time of observation. Research data tested by t-test, f-test, test of determination coefficient, and multiple linear regression test. Data analysis results obtained from this research were: 1). CAR has no significant effect on ROE in the banking industry on the Indonesia Stock Exchange in the 2011 - 2016 period,. 2). DER has no significant effect on ROE in the banking industry on the Indonesia Stock Exchange in the 2011 - 2016 period, 3). LDR has no significant effect on ROE in the banking industry on the Indonesia Stock Exchange in the 2011 - 2016 period, 4). NPL have a significant effect on ROE in the banking industry on the Indonesia Stock Exchange in the 2011 - 2016 period, 5). CAR, DER, LDR, and NPL simultaneously have a significant effect on ROE in the banking industry on the Indonesia Stock Exchange in the period 2011 - 2016.

Keywords*: financial performance, banking industry*

INTRODUCTION

Capital is one of the important factors in determining the health of the bank. One of the measuring instruments is from Capital Adequacy Ratio (CAR). Capital adequacy will be able to support the work of the bank, especially in critical times. This capital adequacy will bring the bank to a safe condition. So that capital plays a crucial role in the survival of the bank (Kasmir, 2006). Financial regulation imposes requirements on banks to hold certain amounts of capital. When the financial crisis began in 2007, the capital banks held fell significantly. Regulators tended to maintain their rules, so that if banks capital had fallen below the regulatory thresholds, they were required to raise additional capital (Nyawira, et al, 2017). Bank Indonesia determined the minimum core capital requirement for commercial banks amounting to Rp 80.00 billion at the end of 2007 and increased to Rp 100.00 billion at the end of 2010. The health of banks was also influenced by the level of bank liquidity. Dendawijaya (2005) said that liquidity is the ability of a bank to fulfill its debt obligations, can repay all of its depositors, and can meet credit requests submitted by debtors without delay.

To measure the quality of bank assets, the financial ratio of Non Performing Loans (NPL) also used in this study. The level of health measured through several financial ratios, has an influence on investment technology (Munawir, 2007), that investment technology uses three different meanings in financial analysis, as contained in three ROI ratios, namely: Return on Assets (ROA), Return on Equity (ROE) and Return on Capital Employed (ROCE) or Return on Net Assets (RONA). ROA is an important matter to be considered by many parties, both investors and creditors, because Return on Assets (ROA) is influential in investing capital.

Based on the descriptions of the problems above, the researcher intends to analyze the factors that can affect the financial performance seen from the assessment of Return on Equity (ROE) in the banking industry companies in the Indonesia Stock Exchange that are selected from the Capital Adequacy Ratio (CAR), Debt to Equity Ratio (DER), Loan to Deposit Ratio (LDR) and Non-Performing Loans (NPL). For this reason, the study is entitled: "Financial Performance of Banking Industry". The problems to be discussed in this study include: 1) Does the Capital Adequacy Ratio (CAR) significantly influence Return on Equity (ROE) in the banking industry on the Indonesia Stock Exchange for the 2011 - 2016 period? 2) Does the Debt to Equity Ratio (DER) significantly influence Return on Equity (ROE) in the banking industry on the Indonesia Stock Exchange in the 2011 - 2016 period? 3) Does the Loan to Deposit Ratio (LDR) have a significant effect on Return on Equity (ROE) in the banking industry on the Indonesia Stock Exchange in the 2011 - 2016 period? 4) Does the Non Performing Loan (NPL) significantly influence Return on Equity (ROE) in the banking industry on the Indonesia Stock Exchange for the 2011 - 2016 period? 5) Are Capital Adequacy Ratio (CAR), Debt to Equity Ratio (DER), Loan to Deposit Ratio (LDR) and Non-Performing Loans (NPL) simultaneously have a significant effect on Return on Equity (ROE) in the banking industry on the Indonesia Stock Exchange 2011 - 2016 period?

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Theoretical Review

Agency Theory

Gundono (2012) stated that the core agency relationship is the separation between ownership (principal/ investor) and control (agent/ manager). Investors who hand over authority to the manager. In this case the manager is authorized to manage investor wealth. This agency theory explains the contractual relationship between the manager (agent) and the owner (principal). The owner of the capital authorizes the manager to make decisions with the aim of maximizing the interests of the principal.

Information asymmetry is a condition where confidential information is only owned by companies and managers while investors only get sufficient information. It is seen that managers do not fully convey all the information obtained about the company, so generally the market will respond to that information as a signal to an event that will affect the value of the company which is reflected through the stock price (Jogiyanto, 2014). Based on these circumstances, a good governance system in the company (Good Corporate Governance) is needed in managing the company. The principles of Good Corporate Governance practices that need to be implemented are transparency, accountability, fairness, and responsibility. GCG is directed to reduce information asymmetry between principal and agent which in the end is expected to minimize earnings management actions (Sembiring, 2014).

The Capital Market

The capital market is a meeting between parties who have excess funds and those who need funds by trading securities that generally have a life of more than one year, such as stocks and bonds. The capital market can also be interpreted as a company facility to increase long-term funding needs by selling or issuing bonds. The definition of a capital market which in English is called a stock exchange or stock market is "an organized market or exchange where share (stocks) are traded". That is an organized market where various types of securities are traded (Lesmana & Surjanta, 2008).

Financial Performance

Financial statement analysis is the application of analytical tools and techniques for financial statements that are general purpose and related data to produce estimates and conclusions that are useful in business analysis (Munawir, 2007). Jogiyanto (2008) said that financial performance in banking industry companies is often presented with profitability as seen from the magnitude of Return on Equity (ROE). Where ROE is an industry's ability to generate profits with its own capital. The formula used to measure ROE is:

$$\text{ROE} = \frac{EAT}{\text{Average core capital}}\, x\ 100\% \tag{1}$$

Based on the formula above, the higher the ROE value shows the better performance.

Factors that Influence Financial Performance

Factors that can affect financial performance in banking companies include:

a. Capital Adequacy Ratio (CAR)

Capital Adequacy Ratio (CAR) is a ratio that shows how far all bank assets contain risks (investment credit, securities, invoices to other banks) to be funded by the bank's own capital funds, in addition to obtaining funds from outside sources, such as public funds, loans (debt) and others, are formulated as follows (Kasmir, 2006):

$$\text{CAR} = \frac{\text{Capital}}{\text{FAAR}} \tag{2}$$

FAAR: Fixed Asset According to the Risk
RWA: Fixed Assets by Risk
Based on the formula above, the higher the CAR value indicates the more risky performance.

b. Debt to Equity Ratio (DER)

Debt to Equity Ratio (DER) is a ratio used to measure a bank's ability to cover part or all of its debts, both long and short term, with funds derived from the bank's own capital, formulated (Kasmir, 2006):

$$\text{DER} = \frac{Total\ liability}{\text{Total equity}}\ \text{x}\ 100\% \tag{3}$$

Based on the formula above, the higher the DER value shows poor performance.

c. Loan to Deposit Ratio (LDR)

Loan to Deposit Ratio (LDR) is a ratio to measure how far the bank's ability to pay all public funds and its own capital by relying on credit that has been distributed to the public, formulated as follows (Kasmir, 2006):

$$\text{LDR} = \frac{the\ amount\ of\ credit\ given}{\text{Third party funds} + \text{BILC}}\ \text{x}\ 100\% \tag{4}$$

BILC = Bank Indonesia Liquidity Credit
Based on the formula above, the higher the LDR value shows the less good performance.

d. Non Performing Loan (NPL)

Non-Performing Loans (NPLs) or often called non-performing loans can be interpreted as loans that have difficulty repaying due to intentional factors and or due to external factors beyond the ability of the debtor's control, formulated as follows (Kasmir, 2006):

$$\mathrm{NPL} = \frac{\textit{Problem loans}}{\text{Total credit}} \text{ x } 100\% \tag{5}$$

Based on the formula above, the higher the NPL value shows the less good performance.

Previous Researchs

Some general researchs relevant to the problem in this study can be applied in the table below.

Table 1. Previous Researchs Matrix

No.	Year	Researcher	Variables	Research Result	Similarities	Differences
1.	2012	Setyorini	Independent variables: CAR, DER, BOPO, & NPL. Dependent variable: ROE	CAR has a negative and significant influence to ROE. DER has a negative and significant influence to ROE. BOPO has a negative and significant influence to ROE. NPL has a negative and significant influence to ROE.	The use of analysis techniques in multiple linear regression analysis; with ROE as dependent variable.	This study did not analyze the effect of LDR on ROE .
2.	2011	Purba	Independent variables: CAR, FDR, & BOPO. Dependent variable: ROE	CAR, FDR and BOPO have a significant effect on ROE both partially and simultaneously.	The use of analysis techniques in multiple linear regression analysis; with ROE as dependent variable.	This study did not analyze the effect of DER, LDR, NPL on ROE.
3.	2010	Nugroho	Independent: variables: CAR, LDR, & DAR. Dependent Variable: ROE	CAR, LDR and DAR have significant effect on ROE both partially and simultaneously	The use of analysis techniques in multiple linear rgression analysis; with ROE as dependent variable.	This study did not analyze the effect of DER and NPL on ROE
4	2015	Ismawati, Kun and Istria, Paula Chrisna	Independent: variables: CAR, ROE, ROA, NPL, LDR, & BOPO. Dependent Variable: Financial distress.	CAR and NOPO have a positive and not significant effect; ROE has a negative and not significant effect; ROA has a negative and not significant effect; NPL & LDR have a positive and significant effect on financial distress in banking companies in Indonesia.	The use of CAR, LDR, and NPL variables; also the use of multiple linear regression analysis techniques.	This research did not use ROE, ROA, and BOPO

Thinking Framework

Based on previous theories and research that are relevant to this research, the framework of thought in this research can be formulated as shown below:

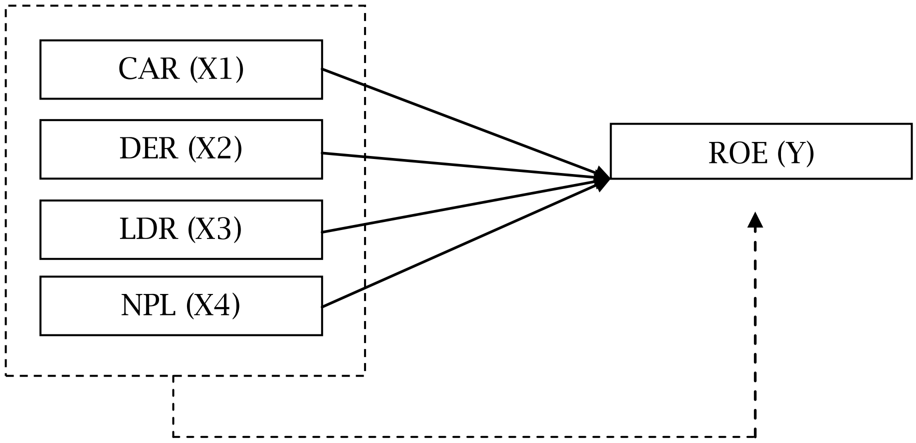

Fig 1. Thinking framework

Information:

→ Effect of independent variables on the dependent variable partially

- - -▶ The influence of independent variables on the dependent variable simultaneously

Hypothesis

Based on the framework of thought above, the hypothesis in this study can be formulated as follows:

H0: $\beta1$ =0, It is suspected that Capital Adequacy Ratio (CAR) has no significant effect on Return on Equity (ROE) in the banking industry on the Indonesia Stock Exchange in the 2011 - 2016 period.

Ha : $\beta1$ $\neq$0, It is suspected that Capital Adequacy Ratio (CAR) has a significant effect on Return on Equity (ROE) in the banking industry on the Indonesia Stock Exchange in the 2011 - 2016 period.

H0 : $\beta2$ =0, It is suspected that Debt to Equity Ratio (DER) has no significant effect on Return on Equity (ROE) in the banking industry on the Indonesia Stock Exchange in the 2011 - 2016 period.

Ha : $\beta2$ $\neq$ 0, It is suspected that Debt to Equity Ratio (DER) has a significant effect on Return on Equity (ROE) in the banking industry on the Indonesia Stock Exchange in the 2011 - 2016 period.

H0 : $\beta3$ = 0, It is suspected that Loan to Deposit Ratio (LDR) has no significant effect on Return on Equity (ROE) in the banking industry on the Indonesia Stock Exchange in the 2011 - 2016 period.

Ha : $\beta3$ $\neq$ 0, It is suspected Loan to Deposit Ratio (LDR) has a significant effect on Return on Equity (ROE) in the banking industry on the Indonesia Stock Exchange in the 2011 - 2016 period.

H0: $\beta4$ = 0, It is suspected that Non-Performing Loans (NPLs) have no significant effect on Return on Equity (ROE) in the banking industry on the Indonesia Stock Exchange in the 2011 - 2016 period.

Ha : $\beta 4 \neq 0$, It is suspected that Non-Performing Loans (NPLs) have a significant effect on Return on Equity (ROE) in the banking industry on the Indonesia Stock Exchange in the period 2011 - 2016.

H0 : $\beta 1 = \beta 2 = \beta 3 = \beta 4 = 0$, It is suspected that Capital Adequacy Ratio (CAR), Debt to Equity Ratio (DER), Loan to Deposit Ratio (LDR) and Non-Performing Loans (NPL) simultaneously have no significant effect on Return on Equity (ROE) in the banking industry in the Indonesia Stock Exchange in the period 2011 - 2016.

Ha: $\beta 1 \neq \beta 2 \neq \beta 3 \neq \beta 4 \neq 0$ It is suspected that Capital Adequacy Ratio (CAR), Debt to Equity Ratio (DER), Loan to Deposit Ratio (LDR) and Non-Performing Loans (NPL) simultaneously have a significant effect on Return on Equity (ROE) in the banking industry in the Indonesia Stock Exchange in the period 2011- 2016.

RESEARCH METHOD

This research is a quantitative case study which aims to determine the factors that influence the financial performance of the banking industry in the Indonesian stock exchange. This study uses secondary data from the Indonesian stock exchange obtained by the documentation method. The population in this study are companies included in the banking industry on the Indonesia Stock Exchange in 2011 to 2016, a number of 41 companies samples that meet the criteria are 28 banks that are registered and issued financial statements during the year of observation.

The results of the descriptive analysis of each variable in this study can be seen in detail in the table below.

Table 2. Descriptive Statistics Results

	N	Minimum	Maximum	Mean	Std. Deviation
CAR	168	0.0200	109.3100	7.341131	16.5018946
DER	168	3.0300	103.4000	9.402798	7.9377465
LDR	168	0.1115	1162.3469	37.915913	192.9691824
NPL	168	0.0000	0.9100	0.036786	0.0822099
ROA	168	-0.3171	162.4523	3.107261	13.16835297
Valid N (listwise)	168				

a. Capital Adequacy Ratio (CAR)
   CAR is a comparison between own capital and Risk Weighted Assets (RWA). This ratio is used as an indicator of the ability of a bank to cover a decrease in assets due to losses on bank assets using its own capital. The Descriptive Results of CAR on banking companies that went public on the IDX revealed that the amount of data entered was 168 companies with valid N or processed data of 168 and N missing or unprocessed data of 0. Mean or average CAR in 2011 - 2016 amounting to 7.3411300. Standard deviation of 16.5018946 from the standard results of errors of mean can be determined the minimum and maximum population data range. The minimum ratio in 2011 - 2016 was 0.0200 while the maximum ratio was 109.3100.
b. Debt to Equity Ratio (DER)
   Debt to Equity Ratio (DER) is a ratio used to measure a bank's ability to cover part or all of its debts. both long and short term. with funds derived from the bank's own capital. Descriptive results of DER on banking companies that go public on the IDX note that the amount of data entered is 168 companies with valid N or processed data as much as 168 and N missing or unprocessed data as much as 0. Mean or average DER in 2011- 2016 amounted to 9.402798. standard deviation of 7.9377465 from the standard results of

errors of mean can be determined the minimum and maximum population data range. The minimum ratio in 2011 - 2016 was 3.0300. While the maximum ratio is 103.4000.

c. Loan to Deposit Ratio (LDR)
   Loan to Deposit Ratio (LDR) is a ratio to measure how far the bank's ability to pay all public funds and its own capital by relying on credit that has been distributed to the public. Descriptive Results of LDR on banking companies that go public on the Stock Exchange is known that the amount of incoming data is 168 companies with valid N or processed data as much as 168 and N missing or unprocessed data as much as 0. Mean or average NPM in 2011 - 2016 amounted to 37.915913. with a standard deviation of 192.9691824 from the standard results of errors of mean can be determined the minimum and maximum population data range. The minimum ratio in 2011 - 2016 is 0.1115. while the maximum ratio is 1162.3469.
d. Non Performing Loan (NPL)
   Non-Performing Loans (NPLs) or often called non-performing loans can be interpreted as loans that experience repayment difficulties due to intentional factors and or due to external factors beyond the ability of the debtor's control. Descriptive Results of NPLs on banking companies that go public on the IDX note that the amount of data entered is 168 companies with valid N or processed data as much as 168 and N missing or data that is not processed as much as 0. Mean or average NPL is in 2011 - 2016 amounted to 0.036786. with a standard deviation of 0.0822099 from the standard results of errors of mean can be determined the minimum and maximum population data range. Minimum ratio in 2011 - 2016 is 0.0000. While the maximum ratio is 0.9100.
e. Return on Equity (ROE)
   Return on Equity (ROE) is an industry's ability to generate profits with its own capital. Descriptive results of Return on Equity (ROE) for banking companies that go public on the Stock Exchange is known that the number of incoming data is 168 companies with valid N or processed data as much as 168 and N missing or unprocessed data as much as 0. Mean or average ROE in 2011 - 2016 amounted to 3.107261 with a standard deviation of 13.2835297. from the standard results of errors of mean can be determined the minimum and maximum population data range. The minimum ratio in 2011 - 2016 was -0.3171. While the maximum ratio is 162.4523.

ANALYSIS AND DISCUSSION

1. Multiple Linear Regression Test

Analysis of Multiple Linear Regression in this study was conducted using the SPSS version 16 program. so that the results of the print out were obtained as follows:

Table 3. Multiple Linear Regression Test Results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.767	2.704		-1.023	0.317
	CAR	0.206	0.081	0.349	2.539	0.018
	DER	0.270	0.249	0.142	1.085	0.1689
	LDR	0.000	0.006	-0.012	-0.090	0.929
	NPL	122.402	20.963	0.803	5.839	0.000

a. Dependent Variable: ROE

Source: Data Results April 2018.

From the results of the linear regression test with the help of the SPSS version 16 program obtained:

a = -2.767
b1 = 0.206
b2 = 0.270
b3 = 0.000
b4 = 122.402

So that the regression equation is obtained as follows:

Y = -2.767 + 0.206X1 + 0.270 X2 + 0.000 X3 + 122.402 X3

Meaning:

1) The regression coefficient for CAR (X1) is 0.206 and is positive. This means that every change of one percent in the CAR assuming other variables remain. ROE that occurs is 20.6% in the same direction.
2) The regression coefficient for DER (X2) is 0.270 and is positive. This means that for every one percent change in DER assuming other variables remain. ROE that occurs is 27% in the same direction.
3) The regression coefficient for LDR (X3) is 0.000 and is positive. This means that every one percent change in the LDR assuming other variables remain. ROE changes that occur are equal to 0% in the same direction (no significant changes).
4) The regression coefficient for NPL (X4) is 122.402 and is positive. This means that for every one percent change in NPL assuming other variables remain. The change in ROE that occurs is 122.402% in the same direction.

2. T Test

This analysis is used to determine whether or not influence between the independent variables consisting of CAR, DER, LDR, and NPL to the dependent variable, namely ROE in banking companies listed on the Indonesia Stock Exchange in the 2011 - 2016 period.

a. The influence of CAR on the dependent variable is ROE on banking companies listed on the Indonesia Stock Exchange for the period 2011 - 2016.

   Test steps:

   1) Hypothesis Formulation

      Ho : $\beta 1 = 0$ allegedly the Capital Adequacy Ratio (CAR) has no significant effect on Return on Equity (ROE) in the banking industry on the Indonesia Stock Exchange in the 2011 - 2016 period.

      Ha : $\beta 1 \neq 0$ allegedly the Capital Adequacy Ratio (CAR) has a significant effect on Return on Equity (ROE) in the banking industry on the Indonesia Stock Exchange in the 2011 - 2016 period.

   2) Selected level of significance $\alpha = 0.05$

      df (degrees of freedom) = (n-k–1)

      t table = t (α/2; n-k-1)
      = t (0.05/2; 168-4-1)
      = t (0.05/2; 163)
      = 1.977 (see attachment t test table)

   3) t count value t count = 2.539

      (see attachment of multiple linear regression test)

   4) Testing Criteria

      Ho is accepted. because t count >t table is 1.977 >1.977 with p-value smaller than 0.05. that is (0.000< 0.05).

5) Conclusion

Because t count >t table (2.539 >1.977) with p-value greater than 0.05. meaning that Ho is rejected and Ha is accepted. meaning that Capital Adequacy Ratio (CAR) has a significant effect on Return on Equity (ROE) in the banking industry at the Exchange Indonesian securities for the 2011 - 2016 period.

b. Effect of Debt to Equity Ratio (DER) on Return on Equity (ROE) in the banking industry on the Indonesia Stock Exchange in the 2011 - 2016 period.

Test steps:

1) Hypothesis Formulation

Ho : $\beta 2 = 0$ it is suspected that Debt to Equity Ratio (DER) has no significant effect on Return on Equity (ROE) in the banking industry on the Indonesia Stock Exchange in the 2011 - 2016 period.

Ha : $\beta 2 \neq 0$ allegedly Debt to Equity Ratio (DER) has a significant effect on Return on Equity (ROE) in the banking industry on the Indonesia Stock Exchange in the 2011 - 2016 period.

2) Selected level of significance α=0.05

df (degrees of freedom) = n-k-1

t table = t (α/2; n-k-1)
= t (0.05/2; 168-4-1)
= t (0.05/2; 163)
= 1.977 (see attachment t test table)

3) t count value

t count = 1.085

(see attachment of multiple linear regression test)

4) Testing Criteria

Ho is accepted because t arithmetic < t table is 1.085 < 1.977 with p-value greater than 0.05 that is (0.289 > 0.05).

5) Conclusion

Because t count< t table (1.085< 1.977) with p-value greater than 0.05. meaning that Ho is accepted and Ha is rejected. meaning Debt to Equity Ratio (DER) has no significant effect on Return on Equity (ROE) in the banking industry on the Indonesia Stock Exchange for the period 2011 - 2016.

c. Effect of Loan to Deposit Ratio (LDR) on Return on Equity (ROE) in the banking industry on the Indonesia Stock Exchange in the 2011 - 2016 period.

Test steps:

1) Hypothesis Formulation

Ho : $\beta 3 = 0$ allegedly the Loan to Deposit Ratio (LDR) has no significant effect on Return on Equity (ROE) in the banking industry on the Indonesia Stock Exchange in the 2011 - 2016 period.

Ha : $\beta 3 \neq 0$ allegedly the Loan to Deposit Ratio (LDR) has a significant effect on Return on Equity (ROE) in the banking industry on the Indonesia Stock Exchange for the 2011 - 2016 period.

2) Selected level of significance α=0.05

df (degrees of freedom) = n-k-1

t table = t (α/2; n-k-1)
= t (0.05/2; 168-4-1)
= t (0.05/2; 163)
= 1.977 (see attachment t test table)

3) t count value

   t count = -0.090

   (see attachment of multiple linear regression test)

4) Testing Criteria

   Ho is accepted. because t count > t table is -0.090 >-1.977 with p-value greater than 0.05. namely (0.929 > 0.05).

5) Conclusion

   Because t count > t table (-0.090 > -1.977) with p-value greater than 0.05. it means that Ha is rejected and H0 is accepted. meaning that the Loan to Deposit Ratio (LDR) has no significant effect on Return on Equity (ROE) on banking industry on the Indonesia Stock Exchange for the period 2011 - 2016.

d. The Influence of Non-Performing Loans (NPLs) on Return on Equity (ROE) in the banking industry on the Indonesia Stock Exchange in the 2011 - 2016 period.

   Test steps:

   1) Hypothesis Formulation

      Ho : $\beta 4 = 0$ allegedly Non-Performing Loans (NPLs) have no significant effect on Return on Equity (ROE) in the banking industry on the Indonesia Stock Exchange for the period 2011 - 2016.

      Ha : $\beta 4 \neq 0$ it is suspected that Non-Performing Loans (NPLs) have a significant effect on Return on Equity (ROE) in the banking industry on the Indonesia Stock Exchange for the 2011 - 2016 period.

   2) Selected level of significance α=0.05

      df (degrees of freedom) = n-k-1

      t table = t (α/2; n-k-1)

      = t (0.05/2; 168-4-1)

      = t (0.05/2; 163)

      = 1.977 (see attachment t test table)

   3) t count value

      t count = 5.839

      (see attachment of multiple linear regression test)

   4) Testing Criteria

      Ho is accepted. because t count > t table is 5.839 > 1.977 with p-value smaller than 0.05. that is (0.000 < 0.05).

   5) Conclusion

      Because t count > t table (5.839 > 1.977) with p-value greater than 0.05. meaning that Ho is rejected and Ha is accepted. meaning that Non-Performing Loans (NPLs) have a significant effect on Return on Equity (ROE) in the banking industry in the Exchange Indonesian securities for the 2011 - 2016 period.

3. Test F

As for the F test in this paper aims to examine the significance of the influence together between independent variables. namely from the Capital Adequacy Ratio (CAR). Debt to Equity Ratio (DER). Loan to Deposit Ratio (LDR) and Non-Performing Loans (NPL) simultaneously have a significant effect on Return on Equity (ROE) in the banking industry on the Indonesia Stock Exchange for the 2011 - 2016 period. Test is testing the hypothesis of the regression coefficient in total.

Test steps:

a. Hypothesis Formulation

Ho : β1 = β2 = β3 = 0 alleged Capital Adequacy Ratio (CAR). Debt to Equity Ratio (DER). Loan to Deposit Ratio (LDR) and Non-Performing Loans (NPL) simultaneously have no significant effect on Return on Equity (ROE) in the banking industry on the Indonesia Stock Exchange in the 2011 - 2016

Ha : β1≠ β2≠ β3≠ 0 suspected Capital Adequacy Ratio (CAR). Debt to Equity Ratio (DER). Loan to Deposit Ratio (LDR) and Non-Performing Loans (NPL) simultaneously have a significant effect on Return on Equity (ROE) in the banking industry on the Indonesia Stock Exchange in the 2011 - 2016 period.

b. Selectable level of significance df (degrees of freedom) = (n-k-1)

F table = (n-k-1)

F table = (168-4-1)

F table = 2.42 (see appendix F test table)

c. F count value

F count = 9.244

(see SPSS output attachment).

d. Testing Criteria

Ho is accepted and Ha is rejected because. F arithmetic > F table is 9.244 >2.42. and p-value is greater than 0.05 (0.000 < 0.05).

e. Conclusion

Because F count > F table (9.244 >2.42) and p-value is greater than 0.05 (0.000< 0.05). it means that Ho is accepted and Ha is rejected. meaning Capital Adequacy Ratio (CAR). Debt to Equity Ratio (DER). Loan to Deposit Ratio (LDR) and Non-Performing Loans (NPL) simultaneously have a significant effect on Return on Equity (ROE) in the banking industry on the Indonesia Stock Exchange for the 2011 - 2016 period.

4. Test of Determination Coefficient

To measure the proportion/ presentation of contributions from all independent variables (X1. X2. X3. X4. X5 and X6) contained in the regression model of the dependent variable regression model (Y) using the formula:

$$R^2 = \frac{\text{JKR}}{\text{JKT}} \qquad (6)$$

Where:

R2 : Coefficient of Determination

JKR : Number of Residual Squares

JKT : Total Middle Squares

From the results of data analysis with the help of computer SPSS Version 16 program. the results of data analysis in this study obtained the value of the Determination Coefficient (R^2) as follows:

Table 4. Determination Coefficient Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.785[a]	0.617	0.550	5.6323181

a. Predictors: (Constant). NPL. LDR. DER. CAR

Source: primary data processed. April 2018.

Based on the results of the print-out above, it can be seen that the adjusted R Square (R^2) value in this study is 0.550. So it can be interpreted that the variation of the independent variables consisting of CAR, DER, LDR, and NPL on ROE in banking companies listed on the Indonesia Stock Exchange for the period 2011 - 2016 was 55% while the remaining 45% was influenced by other factors. So that it can be seen that the selection of variables that can affect ROE is appropriate. Considering the coefficient of determination in this study is relatively large,but there are still many other variables that can be used to predict ROE levels in banking companies listed on the Indonesia Stock Exchange in 2011 - 2016.

DISCUSSION

Based on the results of the calculation from the hypothesis test. it is known that CAR. DER. LDR. and NPL have a significant effect on ROE on banking companies that go public on the IDX. This result support the other reseach by Setyorini. 2012; Purbo. 2011; and Nugroho. 2010. The CAR ratio is used to measure the extent to which the bank's capital capability in anticipation of a decline in assets. According to Kasmir (2006: 76) CAR is a financial ratio that measures the ability of a bank to bear risks that may arise from assets.

Basically. the higher the CAR. the higher the stock price will be; because the bank that has a high CAR. Means that the bank has sufficient capital to carry out its business activities and is sufficiently at risk if the bank is liquidated. The higher the CAR can also illustrate that the bank is increasingly solvable. With such conditions. namely sufficient capital, a bank will be able to finance its many services. In addition to a large CAR equal to large capital and low risk assets. The main thing is with high CAR. the risk of investing is low. Things like that will encourage investment in droves to buy these shares. In accordance with the law of supply and demand. this condition will increase the stock price. This ratio has a positive relationship to stock prices.

The results of this study also indicate that DER has no significant effect on ROE in banking companies listed on the Indonesia Stock Exchange in the period 2011 - 2016. This result doesn’t support the research by Setyorini (2012). The ability to generate profits with own capital in banking companies is not much influenced by the amount of total liabilities and total equity. The higher the ratio of total liabilities to total equity does not affect the increasing ability of banking companies to generate profits.

The results of the research on the fourth variable indicate that LDR has a significant effect on the stock price of banking companies that go public on the IDX. This result is in accordance with research by Nugroho (2010). The LDR reflects the business activities or daily operations of banking. How is the operation financed. is it more than the company's debt or capital. Investors will prefer banks that are able to finance their operations with capital or if they have to be financed with debt. then the bank must be able to return it with assets owned. With high bank liquidity. this will increase consumer confidence in the bank. So that makes investors glance at the company to invest and will have an impact on the increase in stock prices.

Based on the results of this study it can be seen that Non-Performing Loans (NPLs) can be interpreted as loans that have difficulty repaying due to intentional factors and or because external factors beyond the ability of the debtor's control is one variable that can significantly influence the ability banking companies in making profits. It support Setyorini’s research result (2012). The large ratio of non-performing loans to total credit can affect the ability of banking companies to generate profits. Considering that the banking company is able to generate profits from the amount of credit given. it is necessary to try to reduce the occurrence of non-performing loans. This effort can be done by increasing supervision in lending to banking companies.

Based on the results of testing the magnitude of the coefficient of determination can be seen that the adjusted R Square (R^2) value in this study is 0.550. So it can be interpreted that the variation of the independent variables consisting of CAR, DER, LDR, and NPL on ROE in banking companies listed on the Indonesia Stock Exchange for the period 2011 - 2016 was 55% while the remaining 45% was influenced by other factors. So that it can be seen that the selection of variables that can affect ROE is appropriate. Considering the coefficient of determination in this study is relatively large, but there are still many other variables that can be used to predict ROE levels in banking companies listed on the Indonesia Stock Exchange in 2011 - 2016.

This can attract investors to join and buy company shares. Because the company's growth prospects also stated that the company's ability to generate profits and growing companies would have a relatively higher market value for each asset owned. In addition. banking companies that have a reputation for sound or good performance and fluctuations in profitability tend to increase, which can signal increasingly market conditions. This condition is also able to lure investors to invest their funds through shares in sacrificial companies that go public on the IDX.

CONCLUSIONS

Based on data analysis and discussion in this study, the following conclusions can be drawn: 1). Capital Adequacy Ratio (CAR) has no significant effect on Return on Equity (ROE) in the banking industry on the Indonesia Stock Exchange in the 2011 - 2016 period. This is evident from the value of t count > t table (2.539 > 1.977) with more p-values the size of 0.05 means that Ho is rejected and Ha is accepted. 2). Debt to Equity Ratio (DER) has no significant effect on Return on Equity (ROE) in the banking industry on the Indonesia Stock Exchange in the 2011 - 2016 period. This can be evidenced by the value of t count < t table (1.085 < 1.977) with p-value is greater than 0.05. meaning Ho is accepted and Ha is rejected. 3). The Loan to Deposit Ratio (LDR) has no significant effect on Return on Equity (ROE) in the banking industry on the Indonesia Stock Exchange in the 2011 - 2016 period. This can be evidenced by the value of t count > t table (-0.090 > -1.977) with p-value is greater than 0.05. Meaning that Ha is rejected and H0 is accepted. 4). Non-Performing Loans (NPLs) have a significant effect on Return on Equity (ROE) in the banking industry on the Indonesia Stock Exchange in the 2011 - 2016 period. this can be evidenced by the value of t count > t table (5.839 > 1.977) with more p-values the size of 0.05 means that Ho is rejected and Ha is accepted. 5). Effect of Capital Adequacy Ratio (CAR). Debt to Equity Ratio (DER). Loan to Deposit Ratio (LDR) and Non-Performing Loans (NPL) simultaneously have a significant effect on Return on Equity (ROE) in the banking industry on the Indonesia Stock Exchange in the period 2011 - 2016. This can be proven by the F count > F table (9.244 > 2.57) and p-value greater than 0.05 (0.000 < 0.05). Meaning that Ho is accepted and Ha is rejected.

RECOMMENDATIONS

The conclusions above as the base of the suggestions as follows: 1). There must be more analysis tools to see company's performance, there are: company’s ability in profit, liquidity, and it’s solvency; because it is important for investors’s decision making in investment activities. 2). Limitation of this research is we couldn’t make any generalization from the research’s result, so we need to develop the population of this study with any other companies listed in the Indonesia Stock Exchange.

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