

Effect of Financial Distress Ratio in Banking Company in Indonesia: Period 2011-2015

Khayatun nufus
Nicky Audina
Awaluddin Muchtar
e-mail: nufus_awal@yahoo.co.id

Abstract

This study aims to analyze the influence of financial ratios proxied with Non Performing Loans (NPLs), Loans to Deposit Ratio (LDR), Operational Costs to Operating Income (BOPO), and Return On Assets (ROA) to financial distress. The data used in this research is obtained from the Annual Publication Financial Report of commercial bank period 2011-2015.

The population in this study were 35 commercial banks registered in the Directory of Bank Indonesia in the category of Private Foreign Exchange National Banks. After passing the stage of purposive sampling, obtained 16 (distress). The statistical method used to test the research hypothesis is logistic regression method.

The results showed that all ratios simultaneously (simultaneously) have an effect on financial distress but partially have no effect. The NPL ratio has no significant positive effect, LDR ratio has no significant positive effect, BOPO ratio has negative effect is not significant and ROA ratio has negative effect is not significant.

Keywords: *NPL, LDR, BOPO, ROA, Financial Distress, Logistic Regression*

Introduction

The global of economy has undergone radical changes in the last two decades. Globalization and technology have encouraged natural selection that leads to 'the strongest that survives'. The success of the market will be obtained by companies that are able to adapt to the current environmental requirements of those who are able to provide what people are ready to buy.

In its development, globalization caused some bad impacts that could be felt, one of them is global financial crisis in 2008 which resulted in weakening business activity in general. One of the impacts of the 2008 financial crisis in the national banking industry is Bank Century which is currently called Bank Mutiara. The decision to take over Bank Century by the government on the grounds that the possibility of systematic impacts is considered by some is not fair. In addition, the global financial crisis that occurred in 2008 also caused three big state-owned banks namely Bank Mandiri, Bank BNI, and Bank BRI requested liquidity support from the government to strengthen bank capital reserves or meet the commitment of infrastructure credit without having to be disrupted liquidity.

The conditions mentioned above indicate a company is experiencing financial difficulties (financial distress) which in the end if the company is not able to get out of these conditions then the company will go bankrupt. Therefore, it takes a variety of ways to prevent a company from being trapped in a financial distress, one of which is to predict financial distress in a company.

Some researchers categorize the condition of financial distress in various criteria. The company is deemed experiencing financial distress when the company suffers losses for three consecutive years or more or when the company has negative cash flows for three years or more (Lakhsan, in Aryani, 2015). According to Brahmata (2007) a company is said to experience financial distress when the company has a performance that shows negative operating profit, negative net profit, negative book equity value and the company experienced a merger. The research of Almilia (2003) and Fitriyah and Hariyati (in Aryani, 2015) states that companies experiencing financial distress ie companies that have EPS (Earning Per Share) negative two years in a row.

Based on the above description, the authors are encouraged to conduct research entitled "The Influence of Financial Ratio to Financial Distress in Banking Companies in Indonesia Period 2011-2015".

Literature Review CAMEL Ratio

In assessing bank performance, the CAMEL method is the standard method used by central banks around the world. Central banks throughout the country have the duty and authority to maintain and control the banks in the banking industry.

This research uses financial ratios with CAMEL method that is Capital, Assets, Management, Earning and Liquidity in accordance with Bank Indonesia Regulation no. 6/10 / PBI / 2004 dated 12 April 2004 concerning the Rating System for Commercial Banks and Circular Letter no. 6/23 / DPNP dated May 31, 2004 concerning Commercial Bank Health Rating System. In accordance with the regulations and circulars of Bank Indonesia, all commercial banks conducting conventional business activities are required to conduct quarterly bank soundness ratings in March, June, September and December.

According to Atikogullari (in Ayu Putri, 2010), the CAMEL approach is a type of financial analysis used to evaluate the financial and managerial performance of a bank to establish the health and safety of the bank. CAMEL ratio describes a relationship or comparison between a certain amount to another amount. With the analysis of financial ratios can be obtained a picture of good or bad state of the state or financial position of a bank.

The CAMEL ratio to be used in this study is as follows:

Non Performing Loan (NPL)

NPL is the ratio between non-performing loans to total loans (Taswan, in Novita and Farida, 2013). NPL is a management capability in managing non-performing loans provided by banks. This ratio can be formulated as follows (Circular Letter No. 12/11 / DPNP dated March 31, 2010):

$$\text{NPL} = (\text{problem loans}) / (\text{total credit}) \times 100\%$$

Loans to Deposit Ratio (LDR)

According to Pandia (in Novita and Farida, 2013), the LDR is the ratio between the credar given to third party funds. If from a lot of credit given is not balanced with the amount of funds collected will cause the liquidity of the bank is reduced. This ratio can be formulated as follows (Circular Letter No. 12/11 / DPNP dated March 31, 2010):

$$\text{LDR} = (\text{total credit}) / (\text{total third party funds}) \times 100\%$$

Operational Cost of Operating Income (BOPO)

Operational Costs of Operating Income (BOPO) or cost of efficiency are used to measure the bank's management capability in controlling operational costs against operating income. This ratio can be formulated as follows (Circular Letter No. 12/11 / DPNP dated March 31, 2010):

$$\text{BOPO} = (\text{Operating costs}) / (\text{Operating income}) \times 100\%$$

Return on Assets (ROA)

Return on Assets (ROA) is the ratio used to measure management ability to generate profit or income from asset management (Cashmere, 2010). This ratio can be formulated as follows (Circular Letter No. 12/11 / DPNP dated March 31, 2010):

$$\text{ROA} = (\text{Gross profit}) / (\text{total assets}) \times 100\%$$

Financial Distress

Financial distress or often called financial difficulties, occurs before a company actually went bankrupt. Financial distress is a condition that indicates the stage of decline in the financial condition of the company that occurred prior to the occurrence of bankruptcy or liquidation (Platt and Platt, 2002).

Financial distress can happen in various companies and can be a marker or signal of bankruptcy that may be experienced by the company. If the company is already in the condition of financial distress, then the management should be careful because it could have entered the stage of bankruptcy.

Management of companies experiencing financial distress must take action to overcome these financial problems and prevent the occurrence of bankruptcy.

In addition to corporate governance issues, financial distress can also be caused by external conditions that are outside the company, such as macroeconomic conditions. A number of authors suggest that macroeconomic factors have a significant impact on the occurrence of financial difficulties and then will have an impact on corporate bankruptcy. But these macroeconomic factors are relatively rare.

Some macroeconomic factors that can cause financial distress include fluctuations in inflation, interest rates, Gross National Product (GNP), availability of credit, employee wage rates and so on. Some of the factors that can cause financial difficulties are closely related to macroeconomic conditions (Graham et al., 2011).

Framework

1. *Effect of NPL on financial distress*

Riyadi (2006) in his research stated that the greater the NPL level shows that banks are not professional in managing credit and bank risk is quite high in line with the NPL ratio. Similarly with Almilia and Herdiningtyas (2005) states that the worse the quality of bank credit that causes the number of problem loans is greater than the possibility of a bank in the increasingly troubled and NPL have a positive effect. Hypothesis in this research are:

H1: NPL has a positive effect on financial distress.

2. *The influence of LDR on financial distress*

Santoso in Meilita and Suwardi (2014) said that the higher the LDR ratio the higher the probability of a bank going bankrupt. This gives an indication of the lower bank liquidity capability in question. This is because the amount of funds needed to finance the credit becomes greater (Dendawijaya, 2009).

The results of Sumantri and Jurnal (2010) stated that the LDR has a positive and significant impact on bank insolvency prediction. The same is also obtained from Juniarsi and Suwarno (2005) who stated that LDR has a significant positive effect in predicting failure of national private commercial banks nondevisa. Hypothesis in this research are:

H2: LDR has a positive effect on financial distress.

3. *The influence of BOPO on financial distress*

Almilia and Herdiningtyas (2005) in his research suggests that BOPO has a significant positive effect on the problem condition. Similarly, research Riyadi (2006) states that the lower the ratio of BOPO means the better performance of the bank's management, because it is more efficient in using existing resources in the company. If the performance of the banking management is good then the company will generate the desired profit so the company will not experience bankruptcy. Hypothesis in this research are:

H3: BOPO has a positive effect on financial distress.

4. *Effect of ROA on financial distress*

Riyadi (2006) states the greater the ratio of ROA, the greater the level of profit achieved by the bank so that the possibility of a bank in problem condition is getting smaller. Thus the higher the bank's assets are allocated to the loan and the lower the capital ratio the possibility of the bank to fail is increasing. While ROA is higher, the higher the level of health of the bank so the possibility of banks experiencing financial distress will be smaller (Haryati, 2001). Hypothesis in this research are:

H4: ROA has a negative effect on financial distress.

5. *Effect of NPL, LDR, BOPO and ROA together to financial distress*

In all the discussion of each of the above variables can be concluded that the ratio of NPL, LDR, BOPO and ROA can give a big enough impact together on the prediction of bankruptcy conditions in banking companies in Indonesia. So in this case the hypothesis that can be formulated is:

H5: NPL, LDR, BOPO and ROA have an effect on financial distress.

Based on the above description, it can be concluded framework of thinking is as follows:

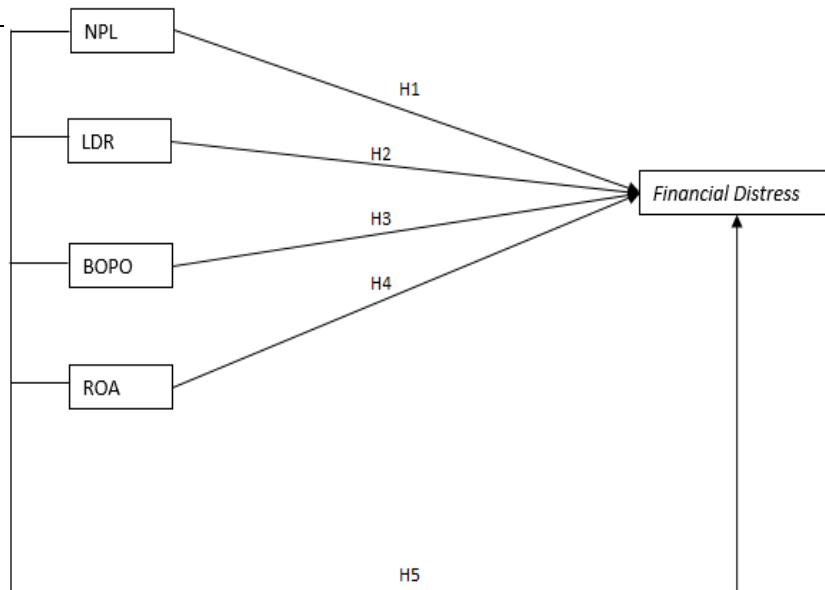


Figure 2.1. Framework

Tabel 3. 1
 Kriteria Pemilihan Sampel

No	Kriteria	Tidak Memenuhi Kriteria	Akumulasi
1	Terdaftar sebagai bank umum swasta nasional devisa di Direktori Bank Indonesia	35	35
2	Terdaftar sebagai perusahaan perbankan di Bursa Efek Indonesia (BEI) periode 2011-2015.	9	26
2	Bank umum selain bank syariah karena kriteria bank umum konvensional berbeda dengan bank umum syariah.	4	22
3	Perusahaan mempublikasikan laporan keuangan secara rutin selama periode 2011-2015.	6	16
4	Laporan keuangan yang diterbitkan menyediakan semua data yang dibutuhkan mengenai variabel-variabel penelitian.	-	16
5	Bank yang diteliti tidak melakukan merger atau dibekukan selama periode 2011-2015.	-	16
Jumlah perusahaan sampel			16
Total tahun pengamatan			5
Jumlah total tahun pengamatan			80

POPULATION AND SAMPLES

The population used in this study are all national private foreign exchange public banks listed in the Bank Indonesia Directory 2011-2015.

The sample selection used in this research is purposive sampling. According Sugiyono (2007) purposive sampling technique is a technique of determining the sample with certain considerations. The sample in this study is determined by the following criteria:

- a. Registered as a banking company in Indonesia Stock Exchange (IDX) period 2011-2015.
- b. Commercial banks other than sharia banks because the criteria of conventional commercial
- c. banks differ from sharia commercial banks.
- d. The Company publishes its financial statements regularly during the period 2011-2015.
- e. The published financial statements provide all the required data on the research variables.
- f. The surveyed bank did not merge or freeze during the period 2011-2015.
- g. The banks that are sampled fall into two categories:
 - 1) Banks that are not problematic, that is:
 - a) These banks have not suffered losses in 2011-2015.
 - b) The banks are still operating until the observation year ends.
 - 2) Problem banks, namely:
 - a) Banks that have negative EPS values between 2011-2015, because according to Elloumi and Gueyie (2001) are marked by a decrease in EPS.
 - b) Banks declared bankrupt or closed by Bank Indonesia.
The sample selection process based on predetermined criteria is shown in the following table:

DATA ANALYSIS TECHNIQUE

This study uses descriptive statistical analysis and logistic regression analysis. The method of analysis used in this study is binary logistic regression analysis. Selection of this method is based on the reason because the independent variables that exist in this study is a combination of metric and non metric and the dependent variable is binary data. Binary data is a type of nominal data with two criteria. The purpose of using logistic regression is to predict the dependent variable in the form of binary variables using the data of independent variables that are already known in magnitude.

The dependent variable of this study is a dichotomous variable with a description of one (1) for a distressed firm and a zero (0) description for a non-distressing company. Logistic regression in this research is used to test the influence of financial ratios (NPL, LDR, BOPO, ROA) to financial distress.

The logistic regression model applied to the model proposed by the researcher was tested using SPSS 23 software. The analysis of this study did not require the normality test and the classical assumption test on the independent variable (Ghozali, 2012). Testing is done with level of significance (α) 5%. Logistic regression model used in this research is as follows:

$$FD = \alpha + \beta_1. NPL + \beta_2. LDR + \beta_3. BOPO + \beta_4. ROA + \epsilon$$

Information:

FD: Dummy variable, code "1" for distress company and code "0" for non-distress company.

A: Constants

B: The variable coefficients

NPL: Non Performing Loan

LDR: Loans to Deposit Ratio

BOPO: Operational Cost of Operating Income

ROA: Return On Assets

RESULTS AND DISCUSSION

Descriptive Statistics Analysis

To describe the variables studied, used descriptive statistics that can analyze and present quantitative data in order to describe the data. In the following table can be seen the minimum, maximum, average (mean) and standard deviation of each research variable.

	N	Minimum	Maximum	Mean	Std. Deviation
Non Performing Loan	80	.002	.123	.02390	.022592
Loans to Deposit Ratio	80	.038	1.192	.87984	.155633
Biaya Operasional terhadap Pendapatan Operasional	80	.362	1.849	.81619	.219641
Return On Assets	80	-.076	.038	.01328	.018059
Valid N (listwise)	80				

The minimum value of the NPL variable is 0.002 (0.2%) obtained from Bank Bumi Arta in 2013 and the maximum NPL of 0.123 (12.3%) occurred in Bank J. Trust Indonesia (Bank Mutiara) in 2013 and the value Average NPL of 0.02390 (2.39%) and standard deviation of 0.022592 (2.26%). Viewed from the average NPL, this indicates that the risk of non performing loans on loans provided in all of the observed data has a good enough ability to manage credit because it is still below 5% as stipulated by Bank Indonesia.

The minimum value of the LDR variable is 0.038 (3.8%) obtained from Bank CIMB Niaga in 2015 and the maximum LDR of 1.192 (119.2%) occurs at Bank QNB Kesawan in 2015 and the average LDR of 0.87984 (87.9%) and standard deviation of 0.155633 (15.6%). Viewed from the average LDR, this indicates that the liquidity level of the bank in general is quite good because it has not exceed the maximum limit set by Bank Indonesia that is 100%.

The minimum value of the BOPO variable is 0.362 (36.2%) obtained from Bank BCA in 2013 and the maximum BOPO value of 1.849 (184.9%) occurs in Bank J. Trust Indonesia in 2013 and the average BOPO value of 0.81619 (81.6%) and standard deviation of 0.219641 (21.9%). Viewed from the average of BOPO, this indicates that the operational cost level of the operational opinion of the bank in general is quite good because it is still below 94% as determined by Bank Indonesia.

The minimum value of ROA is -0.076 (-7.6%) obtained from Bank J. Trust Indonesia (Bank Mutiara) in 2013 and a maximum ROA value of 0.038 (3.8%) occurred in Bank Central Asia (BCA) at In 2015 and an average ROA of 0.01328 (1.3%). Viewed from the average ROA, this indicates that the level of ability of the company in obtaining profit (profit before tax) generated from the average total assets of banks in general good because it exceeds the minimum limit set by Bank Indonesia is 0.5%.

Based on the results of the sample, obtained a total of 16 banks per year, as many as 12 banks are non-distress (bank) and 4 banks included in the criteria of problems (distress). Problem banks include Bank MNC (ICB Bumiputera Indonesia), Bank QNB Kesawan, Bank OCBC NISP, and Bank of India Indonesia.

TESTING LOGISTIC REGRESSION

1) Assess the Feasibility of the Regression Model (Goodness of Fit)

The purpose of the Goodness of Fit Test is to determine whether the probability distribution of the hypothesis can be used as a model for a particular population. This regression model is measured by the Chi-square value at the bottom of the Hosmer and Lemeshow test. The research model can be said to fit or fit the data if the probability $Sig >> 0,05$, whereas research model is said not fit or not according to data if its probability (sig value) $<0,05$.

Step	Chi-square	df	Sig.
1	.000	2	1.000

In the above table it is found that the statistical value of Hosmer and Lemeshow Test seen in the column of significance shows the value of 1,000 (100%) which, when compared with the significance value of 5%, then the probability significance in this study is more than 0.05 ($1,000 > 0.05$), then the null hypothesis (H0) in this study is acceptable. This condition indicates that the model used in this study fit with the data or means the regression

model is feasible to be used for further analysis, because there is no real difference between the observed classification.

2) Conducting Simultaneous Testing (Omnibust Test of Model Coefficient)

Based on the sample data of 16 samples of banking firms listed on the Indonesia Stock Exchange (BEI) under study using Omnibust Test of Model Coefficient to simultaneously test independent variables against the dependent variable, the results are:

From the above data, it can be concluded that every independent variable, NPL, LDR, BOPO and ROA together affects the dependent variable that is financial distress, because it has a significance value of 0.000 which is smaller than 0.050 ($0.000 \leq 0.050$).

The next step is to assess the overall model (Overall Model Fit). To assess the overall model (Overall Model Fit) is to compare the number -2LL (-2Log Likelihood) in the first step (block number 0) with the number -2LL (2Log Likelihood) in the next step (block number 1). According Ghozali (2012) if there is a decrease, then the model hypothesized fit or in accordance with the data. Decreasing the -2LL (-2Log Likelihood) value indicates that this test model is considered fit. This means the addition of independent variables ie NPL ratio, LDR, BOPO, ROA into the test model will improve the regression model.

Tabel 4. 1
 Overall Model Fit Test

<i>Iteration</i>	<i>-2 Log Lokelihood</i>
<i>Step 0</i>	52.013
1	0

Sumber: Data sekunder yang telah diolah

The above table shows the feasibility test (Overall Model Fit) with respect to the number at the beginning of -2LL (-2Log Likelihood) block number = 0, amounted to 52.013 and the number in -2LL (-2Log Likelihood) block number = 1, of 0. This There is a decrease of -2LL (-2Log Likelihood) in block number 0 and block number 1 of $52,013 - 0 = 52,013$. This decrease can be interpreted that with the addition of independent variable, that is ratio of NPL, LDR, BOPO, and ROA put into model can improve model of this research fit and show overall logistic regression model used is good model or fit with data.

3) Testing Coefficient of Determination (Nagelkerke's R Square)

The next test is the coefficient of determination test using Nagelkerke's R Square. This test aims to find out how big the model used to explain dependent variablen by using independent variables used in this test. The value of Nagelkerke's R Square varies between 1 (one) and 0 (zeros). Here is a table showing the value of Nagelkerke's R Square.

Tabel 4. 2
 Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	.000 ^a	.478	1.000

a. Estimation terminated at iteration number 20 because maximum iterations has been reached. Final solution cannot be found.

The magnitude of the regression coefficients can be seen in the Cox and Snell R Square and Nagelkerke R Square columns. Based on the results of data processing using logistic regression method, the coefficient of determination obtained from Cox and Snell R Square is 0,478 (47,8%) and Nagelkerke R Square 1,000 (100%). It shows the combination of independent variable that is NPL ratio, LDR, BOPO and ROA able to explain variation of dependent variable that is financial distress that is 100%.

4) Testing Regression Coefficients

The final step in this research is to test the regression coefficient. Testing regression coefficient aims to find out how much independent variables affect the dependent variable. Logistic regression testing in this study used a significance level of 0.05 (5%). If the significance of $-p$ -value is greater than 5%, then the hypothesis is rejected. This means that the independent variable has no significant effect on the dependent variable. If the significance of p -value is less than 5%, then the alternative hypothesis is accepted. This means that independent variables have a significant effect on the dependent variable.

And the results of testing logistic regression equation, obtained regression model described in the following table.

Tabel 4. 3
 Model Regresi

Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
							Lower	Upper
Step 1 ^a								
NPL	30782.380	326127.645	.009	1	.925	.	.000	.
LDR	2906.554	30841.374	.009	1	.925	.	.000	.
BOPO	-1637.941	17488.249	.009	1	.925	.000	.000	.
ROA	-46578.641	489861.391	.009	1	.924	.000	.000	.
Constant	-2427.981	25708.837	.009	1	.925	.000		

a. Variable(s) entered on step 1: NPL, LDR, BOPO, ROA.

$$FD = -2.427,891 + 30.782,380NPL + 2.906,554LDR - 1.637,941BOPO - 46.578,6416ROA + \epsilon$$

DISCUSSION

1. Effect of NPL on Financial Distress

Based on the above table it can be seen that the variable NPL has p -value of 0.925 where $0.925 > \alpha 0.05$ thus H_0 accepted, H_A rejected. This shows that NPL has no significant effect on financial distress condition. Regression coefficient value of NPL ratio is 30,782,380, the coefficient direction in this research is positive sign, which means that the higher the NPL, the higher the probability of a bank in problem condition. This is because the NPL ratio shows the high number of bad loans in banks. The larger NPLs above 5% indicates the worse the credit quality of the bank due to the high non-performing loans and the higher the credit risk that the bank has to face.

2. The influence of LDR on Financial Distress

Based on the above table it can be seen that the LDR variable has a p -value of 0.925, where $0.925 > \alpha 0.05$ thus H_0 is accepted, H_A is rejected. This indicates that LDR does not have a significant effect on financial distress. The value of regression coefficient of LDR ratio is 2,906,554, the coefficient direction in this research is positive sign, which means that the higher LDR, the greater the probability of a bank in problem condition.

3. The influence of BOPO on Financial Distress

Based on the above table it can be seen that the BOPO variable has a p -value of 0.925, where $0.925 > \alpha 0.05$ thus H_0 is accepted, H_A is rejected. This shows that BOPO has no significant effect on financial distress condition. The value of regression coefficient of BOPO ratio is -1.637,941, the coefficient direction in this research is negative sign which means that the higher the BOPO, the smaller the probability of a bank in problem condition.

4. Effect of ROA on Financial Distress

Based on the above table it can be seen that the variable ROA has a p -value of 0.924, where $0.924 > \alpha 0.05$ thus H_0 accepted H_A rejected. This shows ROA does not have a significant effect on the condition of financial

distress. The value of the regression coefficient of ROA ratio is -4.6578,641, the coefficient direction in this study is negative sign which means that the higher the ROA, the smaller the probability of the bank sutau in problem condition.

CONCLUSIONS AND RECOMMENDATIONS

A. Conclusion

Based on the discussion of research results, it can be concluded as follows:

1. The banking finance ratio in Indonesia proxied by NPL, LDR, BOPO and ROA shows good results. This is because the average NPL, LDR, BOPO and ROA of all sampled companies are still at the threshold permitted by Bank Indonesia. The average NPL ratio is 2.39% where the healthy threshold determined by Bank Indonesia is $\leq 5\%$. The average LDR ratio is 87.9% where the healthy threshold determined by Bank Indonesia is $50\% < \text{ratio} \leq 100\%$. The average BOPO ratio was 81.6% whereby the healthy threshold determined by Bank Indonesia was $\leq 94\%$. The average ROA ratio is 1.3% where the healthy threshold determined by Bank Indonesia is $\geq 0.5\%$.
2. Non-Performing Loan (NPL) ratio has no significant effect on financial distress. This can be seen from the result of logistic regression test of NPL with p-value equal to 0,925 where $0,925 > \alpha 0,05$.
3. Loans to Deposit Ratio (LDR) ratio has no significant effect on financial distress. This can be seen from the result of logistic regression test of LDR with p-value equal to 0,925 where $0,925 > \alpha 0,05$.
4. Operating Cost Ratio to Operating Income (BOPO) has no significant effect on financial distress. This can be seen from the result of BOPO logistic regression test with p-value equal to 0,925 where $0,925 > \alpha 0,05$.
5. Return On Assets (ROA) ratio has no significant effect on financial distress. It can be seen from ROA logistic regression test with p-value equal to 0,925 where $0,924 > \alpha 0,05$.
6. The ratio of NPL, LDR, BOPO, and ROA have an effect on financial distress. This can be seen from the Omnibus Test with significant value 1,000 where $1,000 > 0,05$.

B. Suggestions

Based on the results of the analysis and the conclusions that have been described, the suggestions that can be given are as follows:

1. Theoretical aspects

This study has limitations on the measurement of group category of companies experiencing financial distress and not experiencing financial distress based only on one index size only negative earnings. This research is also only conducted on foreign private national banking company so it can not really represent the banking companies in BEI. Subsequent research is suggested to expand the research sample and use other variables related to financial distress measurements other than CAMEL variables such as firm size, go public bank status and non-public bank, operating cash flow or corporate governance.

2. Practical Aspects

For the Company

Bank management is expected to maintain NPL, LDR, BOPO and ROA ratios in order not to cross the safe threshold set by Bank Indonesia.

For Investors

Investors and potential investors are expected to always pay attention to the ratio of NPLs, LDR, BOPO and ROA and other financial ratios before investing so as not to put their funds in a distress company that will result in at least the benefits gained.

For Regulators

Regulators in this case Bank Indonesia is expected to always monitor the level of ratios in banks and further encourage banks in implementing risk management and Good Corporate Governance (GCG) to prevent banks in troubled conditions.

BIBLIOGRAPHY

- Almilia, L. S., & Herdiningtyas, W. (2005). Analysis of CAMEL Ratio to Prediction of Problematic Condition at Banking Institution Period 2000-2002. *Journal of Accounting and Financem*, Vol. 7, No. 2.
- Brahmin, R. K. (2007). Identifying Financial Distress Condition in Indonesia Manufacture Industry. *Journal of Accounting*, h. 5-51.
- Cashmere. (2010). *Introduction to Financial Management*. Jakarta: Kencana Prenada Media Group.
- Dendawijaya. (2009). *Banking management*. Jakarta: Ghalia Indonesia.
- Harlan D. Platt, M. D. (2002). Predicting Corporate Financial Distress: Reflections on the *Journal of Economics and Finance*, Vol. 26. Issue 2, p. 184-1999.
- Haryati, S. (2001) Bankruptcy Analysis Bank. *Journal of Economics and Business Indonesia*, Vol. No. 16 4, p. 336-345.
- Pertiwi, A. P. (2010). CAMEL Ratio as an Indicator of Bank Soundness and Bankruptcy Level. Surakarta: Thesis, Sebelas Maret University.
- Qhairunnisa, N. A., & Kristanti, F. T. (2013). Influence Analysis of CAMELS Ratio to Prediction of Problematic Condition at Commercial Banks Listed on IDX Period 2007-2012. Jakarta: Thesis, University of Telkom.
- Rahmania, M. F., & Hermanto, S. B. (2014). Financial Ratio Analysis of Financial Distress of Banking Companies Empirical Study at BEI 2010-2012. Surabaya: Thesis, STIESIA Surabaya.
- Rahmawati, A. I. (2015). Financial Ratio Analysis of Financial Condition. Semarang: Thesis, Dipenogoro University.
- Riyadi, S. (2006). *Banking Assets and Liability Management*. Jakarta: Raja Grafindo Persada.
- Sumantri & Jurnal, T. (2010). Benefit of Financial Ratios in Predicting Bankruptcy of National Bank. *Journal of Business and Accounting*, Vol. 12 No. 1.
- Sugiyono. (2007). *Quantitative Research Methods, Qualitative and R & D*. Bandung: Alfabeta.