ANALYSIS THE INFLUENCE OF NON PERFORMING LOAN, LOAN TO DEPOSIT RATIO, INDEPENDENT COMMISSIONER PROPORTION, NET INTEREST MARGIN, AND CAPITAL ADEQUACY RATIO TOWARDS PROFIT GROWTH OF BANK J TRUST INDONESIA IN 2009-2014 BASED ON RISK-BASED BANK RATING APPROACH

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Abstract
Financial performance is an analysis to assess how well the performance of a company by using financial performance rules. Banks in Indonesia are required to do self-assessment named as Risk-Based Bank Rating to measure its performance or the bank health level. This study aims to analyze the influence of NPL, LDR, Independent Commissioner Proportion, NIM, and CAR towards Profit Growth of Bank J Trust Indonesia in 2009-2014. During the observation period, all variables are corrected by doing log-transformation due to non-normal distribution and Net Interest Margin (NIM) has been eliminated due to the results of multicollinearity test in classical assumption test. The results shows Non-Performing Loan (NPL), Loan to Deposit Ratio (LDR), Independent Commissioner Proportion, and Capital Adequacy Ratio (CAR) simultaneously are significant explanatory on the dependent variable of Profit Growth. Meanwhile, based on the partial significance test, the independent variables of Non-Performing Loan (NPL), Loan to Deposit Ratio (LDR), Independent Commissioner Proportion, and Capital Adequacy Ratio (CAR) have partial significance influence to the dependent variable of Profit Growth.

Keywords: non-performing loan, loan to deposit ratio, independent commissioner proportion, net interest margin, capital adequacy ratio, profit growth

1. Introduction
Bank works to assist all the needs of economic agents to conduct their economic activities. Not only as an institution who intermediate the transaction in economic activities, bank also run services, such as deposit to those who have excess funds (savers) and credit to those who need funds (borrowers) [22]. Most of the bank treasures, either productive or unproductive, is funded by deposit. Bank should be able to cover risk that may happened when the credit repayment is not running well or when the funds from deposits is taken by its owner. If the condition of bank business is getting worse, then the bank can be classified in experiencing difficulties which may endanger its business sustainability. Several signs happened when bank business is getting worse are the decreasing in capital, asset quality, liquidity, and profitability. As well, if the bank management is not conducted based on the Precautionary Principle and other principles of healthy banking [9].

Bank J Trust Indonesia, formerly known as Bank Mutiara, is a transformation of Bank Century whose capital was in bad condition. At that time, Bank Century was stated in losing clearing conditions or can not pay the money demand from customers. Bank Century believed will leave systemic impact which may create instability in national economy and financial system, if Bank Century is not saved [17]. Then, Bank Century was taken over by Indonesia Deposit Insurance Corporation (LPS) and officially renamed to Bank Mutiara. Bank Mutiara also suffered non-performing loan problem [30]. The recovery process of Bank Mutiara did not go smoothly. In fact, Bank Mutiara bank should get a cash injection of LPS [24]. The injection of funds due to Bank Mutiara is facing capital problems. Bank Mutiara is also having a difficulty in making profit. After making changes on the bank management, and recovery and restructuring efforts, Bank Mutiara officially sold by Indonesia Deposit Insurance Corporation (LPS) to J Trust Co. Ltd [1]. Bank J Trust Indonesia will get additional capital which expected can be useful for the bank business expansion. The additional capital also aims to improve the CAR required by the Financial Services Authority (OJK) of 14% in minimum. The terms set out with the intention to increase liquidity and to improve non-performing loan of Bank J Trust Indonesia [25].

Bank is required to maintain and/or improve its Bank health level by implementing the Precautionary Principle and Risk Management in conducting business activities. Bank health level can be assessed using Risk-Based Bank Rating method, by assessment of Risk Profile, GCG, Earnings, and Capital [5]. Strategic steps in increasing the bank
performance through bank health level improvement have an influence on company profit [29]. There are two dominant assessments that can be used as reference to see the business entity or company has run a good quality management. This assessments can be done by looking at the financial performance and non-financial performance. Financial performance can be seen from the financial statements owned by the company or business entity [12].

2. Literature Review
2.1. Bank Health Level Assessment Ratio
Financial ratio is very important to analyze the financial condition of a company. The ratio is referred as a comparison number from one to another. Answer that will be found in financial ratio is used as materials for further analysis. Financial ratio and financial performance are connected closely [12].

2.1.1. NPL
NPL is a ratio that indicates the ability of a bank management in managing non-performing loan from the total granted loan. The higher the NPL ratio, the worse the credit quality, which will automatically decrease the profit [31]. A bank with more than 5% of NPL ratio is considered to have potential difficulties which endanger the business continuity and will be set under intensive supervision [9].

2.1.2. LDR
LDR is assessed by the ratio between the distributed loans to the deposited funds from a third party. Bank Indonesia limits the LDR of commercial banks as 78% for the lower limit and 92% for the upper limit [8]. A high LDR showed a lot of funds distributed in credit which will generate profit for the bank as the interest income. But, the higher funds distribution in form of credit compared to deposits in a bank, will bring the consequences to the growing risks that must be covered by the bank [32].

2.1.3. Independent Commissioner Proportion
The existence of Independent Commissioner is intended to encourage the creation of more objective working environment and put fairness and equality among the various importance, including the importance of minority shareholders and other stakeholders. The minimum number of independent commissioners should be 50% of the total commissioners [4].

2.1.4. NIM
NIM is the ratio used to measure the ability of bank management in managing its productive assets to generate net interest income [26]. The greater NIM ratio, the better the bank performance in generating interest income which will automatically increase the profit [31].

2.1.5. CAR
CAR shows capital adequacy set by that specifically applies to industries under government supervision, such as banks. If Banks have an adequate capital, Banks can conduct their operations efficiently which will generate profit [32].

2.2. Profit Growth
The overall goal of most company is to maximize profits or company value. More general way to define profits is in terms of what economists refer to as economic profits. Economic profits are the difference between the total revenue and the total opportunity cost of producing the goods and services [10]. Profit growth is measured by the percentage increase in net profit over time [18].

2.3. Research Framework
Bank is required to maintain and/or improve its Bank health level by implementing the Precautionary Principle and Risk Management in conducting business activities. If the condition of bank business is getting worse, then these bank can be classified in experiencing difficulties which may endanger its business sustainability [5]. To assess the performance and health level of commercial banks, Bank Indonesia as the Central Bank in Indonesia issued a method called the Risk-Based Bank Rating, with 4 measurement factors, namely Risk Profile, GCG, Earnings, and Capital. The increase in the bank performance through the improvement of bank health level will have an influence on increasing the company profits [29]. Researcher wants to conduct assessment that can be used as reference to see the financial performance of Bank J Trust Indonesia. The assessment can be done by looking at the financial performance from financial statements owned by the company [12].
2.4. Research Hypothesis
1. Bank J Trust Indonesia Health Level which is measured by NPL, LDR, Independent Commissioner Proportion, NIM, and CAR has simultaneous influence on Profit Growth of Bank J Trust Indonesia.
2. NPL of Bank J Trust Indonesia has a significant influence on Profit Growth of Bank J Trust Indonesia.
3. LDR of Bank J Trust Indonesia has a significant influence on Profit Growth of Bank J Trust Indonesia.
5. NIM of Bank J Trust Indonesia has a significant influence on Profit Growth of Bank J Trust Indonesia.
6. CAR of Bank J Trust Indonesia has a significant influence on Profit Growth of Bank J Trust Indonesia.

3. Research Methodology
3.1. Multiple Regression Analysis
Multiple regression is the appropriate method of analysis when the research problem involves a single dependent variable which is assumed to be related to two or more independent variables. The objective of multiple regression analysis is to predict changes in dependent variable in response to changes in independent variables [16].

3.2. Classical Assumption Test
The main assumptions underlying the regression model are there is no perfect multicollinearity between independent variables, no error autocorrelation, homoscedasticity, means that the error variance is the same for each period, and normal distribution of data [14]. Good regression model must meet the main assumptions of the test.

3.2.1. Normality Test
Normality refers to the shape of data distribution and its correspondence to normal distribution. Shape of any distribution can be described by kurtosis and skewness. If either calculated $z$ value of kurtosis or skewness exceeds the specified critical value, then can be defined that distribution is non-normal. Critical values used is $±1.96$ for 0.05 significance level. Non-normal distribution can be corrected by doing transformation for the analyzed variable. The analyzed variable can be transformed by taking square root, logarithms, squared, cubed, or inverse of variable [16].

Source: Processed data
3.2.2. Multicollinearity Test
Multicollinearity occurs when any single independent variable is highly correlated with a set of other independent variables. Multicollinearity can be seen from the value of tolerance and Variance Inflation Factor (VIF). The value used to indicate the presence of multicollinearity is the tolerance value of ≤ 0.10 or equal to Variance Inflation Factor (VIF) value of ≥10 [14]. Whenever multicollinearity happened, the researcher has a number of options, one of them is eliminates one or more highly correlated independent variables to help the prediction [16].

3.2.3. Heteroscedasticity Test
If the residual variance from the observations to other observations is same then called as Homoscedasticity, and if it is different then called as Heteroscedasticity. A good regression model is the one with Homoscedasticity or have no Heteroscedasticity. There are several ways to detect the presence or absence of Heteroscedasticity, one of them is through Glejser Test. When the significance level is above 0.05, then it can be concluded that the regression model does not have any Heteroscedasticity [14].

3.2.4. Autocorrelation Test
Autocorrelation test aims to test whether there is no correlation between bullies error in t period with bullies error in period t-1 (previously). There are several ways that can be used to detect the presence or absence of autocorrelation, one of them is by doing Runs Test. In Runs Test, if the significance value ≥ 0.05, means the residual is random and no autocorrelation happened.

3.3. Hypothesis Testing
The accuracy of the regression function in interpreting the actual value can be measured by value of the F statistic, value of the t statistic, and value of determination coefficient (R²) [14].

3.3.1. Simultaneous Significance Test (F Test)
F Test basically indicates whether all the independent variables included in the model have influence together on the dependent variable [14]. The hypothesis that will be tested are:
H0: η = η = η = η = 0, if the significance value ≥ 0.05
H1: at least one of β is not equal to 0, if the significance value < 0.05

3.3.2. Partial Significance Test (t Test)
t Test basically shows how far the influence of the independent variables individually explain the dependent variable [14]. The criteria used for t Test are:
1. If significance value < 0.05, then X variable has an individually significant effect on variable Y.
2. If significance value ≥ 0.05, then X variable does not have an individually significant effect on variable Y.

3.3.3. Coefficient of Determination (R²)
R² measures how far the ability of the model to explain the variations of dependent variable. R² is between zero and one. Small value of R² means the ability of independent variables in explaining the dependent variables is limited. R² which close to one means independent variables provide almost all the information needed to predict the variations of the dependent variable [14].

4. Results and Discussion
4.1. Classical Assumption Test
4.1.1. Normality Test
Z skewness and z kurtosis of NPL, 1.8950 and 1.9697; LDR, -0.0877 and -1.2584; ICP, -0.9682 and -0.9375; NIM 0.8836 and 0.4213; CAR, 0.6641 and -0.9381; and PG, -2.3446 and 2.8074. NPL and PG exceed criteria of ±1.96 for 0.05 significance level, then distribution of NPL and PG is non-normal. Non-normal distribution can be corrected by doing transformation for the analyzed variable. Therefore, researcher used log transformation to correct the distribution of the research variables, then the z skewness and z kurtosis of log-transformed variables are NPL, 1.0929 and 0.7812; LDR, -0.1848 and -1.2520; ICP, -0.9682 and -0.9375; NIM, -0.3764 and -0.1581; CAR, 0.5713 and -0.9556, and PG, 1.4956 and 1.1564.

4.1.2. Multicollinearity Test
Due to tolerance value of NIM, which is 0.018, is lower than 0.1, and the VIF of NIM is 54.198 which is higher than 10, means there is multicollinearity occurred between NIM and other independent variables. Therefore, NIM is
eliminated. After NIM is eliminated, the tolerance values of NPL, 0.054; LDR, 0.103; ICP, 0.064; and CAR, 0.082; are higher than 0.1 and VIF values of NPL, 8.757; LDR, 1.912; ICP, 2.687; and CAR, 4.004; are lower than 10, means there is no multicollinearity occurred.

4.1.3. Heteroscedasticity Test
The results of glejser test showed the numbers of 0.074 as significance value of NPL, 0.098 as significance value of LDR, 0.907 as significance value of ICP, and 0.193 as significance value of CAR. Because of all variables have significance value higher than 0.05, means that there is no heteroscedasticity occurred in the regression model.

4.1.4. Autocorrelation test
The criteria that will be used to test the autocorrelation is the significance value ≥ 0.05 which means the residual is random and no autocorrelation happened. The results of Runs Test showed that the significance value is 0.648 which is higher than 0.05 significance value. It means that the residual is random and no autocorrelation happened.

4.2. Regression Analysis and Hypothesis Test
4.2.1. Regression Analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>10.812</td>
<td>.373</td>
<td>28.952</td>
<td>.022</td>
</tr>
<tr>
<td>NPL</td>
<td>2.807</td>
<td>.151</td>
<td>.987</td>
<td>18.603</td>
</tr>
<tr>
<td>LDR</td>
<td>9.132</td>
<td>.396</td>
<td>1.220</td>
<td>23.031</td>
</tr>
<tr>
<td>ICP</td>
<td>5.006</td>
<td>.296</td>
<td>.514</td>
<td>16.935</td>
</tr>
<tr>
<td>CAR</td>
<td>5.297</td>
<td>.260</td>
<td>.620</td>
<td>20.352</td>
</tr>
</tbody>
</table>

*Source: Processed data*

The number of unstandardized coefficients that can be used for the regression analysis formulation. The regression analysis formulation for the influence of NPL, LDR, Independent Commissioner Proportion, and CAR toward Profit Growth of Bank J Trust Indonesia in 2009-2014 is:

\[
\text{Profit} = 10.812 + 2.807 \times \text{NPL} + 9.132 \times \text{LDR} - 5.006 \times \text{ICP} + 5.297 \times \text{CAR}.
\]

The explanations of the regression analysis are:
1. If the value of log NPL, log LDR, log ICP, and log CAR are 0 (zero), then the value of log PG is 10.812.
2. If the value of log NPL is changes or is not 0 (zero), then value of log PG will change according to the value of log NPL multiplied by the constant, which is 2.807.
3. If the value of log LDR is changes or is not 0 (zero), then value of log PG will change according to the value of log LDR multiplied by the constant, which is 9.132.
4. If the value of log ICP is changes or is not 0 (zero), then value of log PG will change according to the value of log ICP multiplied by the constant, which is -5.006.
5. If the value of log CAR is changes or is not 0 (zero), then value of log PG will change according to the value of log CAR multiplied by the constant, which is 5.297.

Due to NIM is eliminated in the classical assumption test, then NIM is not included in the multiple regression analysis.

4.2.2. Simultaneous Significance Test (F Test)
Table 2 shows the significance value of 0.045. Significance value of 0.045 is lower than 0.05, means that null hypothesis is rejected. Alternate hypothesis of F Test is all independent variables of NPL, LDR, Independent Commissioner Proportion, and CAR simultaneously are significant explanatory on Profit Growth. NIM is not included in F Test because NIM is eliminated in classical assumption test.

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1.971</td>
<td>4</td>
<td>493</td>
<td>277.258</td>
<td>.045b</td>
</tr>
<tr>
<td>Residual</td>
<td>.002</td>
<td>1</td>
<td>.002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1.973</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
a. Dependent Variable: PG  
b. Predictors: (Constant), CAR, ICP, LDR, NPL  

Source: Processed data

4.2.3. Partial Significance Test (t Test)  
4.2.3.1. Influence of NPL towards Profit Growth  
The significance value of NPL, which is 0.034, is lower than 0.05, means NPL have an individually significant influence on Profit Growth.

4.2.3.2. Influence of LDR towards Profit Growth  
The significance value of LDR, which is 0.028, is lower than 0.05, means LDR have an individually significant influence on Profit Growth.

4.2.3.3. Influence of Independent Commissioner Proportion towards Profit Growth  
The significance value of Independent Commissioner Proportion, which is 0.038, is lower than 0.05, means Independent Commissioner Proportion have an individually significant influence on Profit Growth.

4.2.3.4. Influence of NIM towards Profit Growth  
Due to NIM is eliminated in classical assumption test, then influence of NIM towards Profit Growth is not calculated.

4.2.3.5. Influence of CAR towards Profit Growth  
The significance value of CAR, which is 0.031, is lower than 0.05, means CAR have an individually significant influence on Profit Growth.

4.2.4. Coefficient of Determination (R²)  
Table 12 shows the Coefficient of Determination of the research variables.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.000</td>
<td>.999</td>
<td>.995</td>
<td>.0421554</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), CAR, ICP, NPL, LDR  

Source: Processed data

The research variables of Non-Performing Loan (NPL), Loan to Deposit Ratio (LDR), Independent Commissioner Proportion, and Capital Adequacy Ratio (CAR) can explain the variation of Profit Growth by 0.999 or 99.9%.

5. Conclusion and Suggestion  
5.1 Conclusion  
1. The assessment of Non-Performing Loan (NPL), Loan to Deposit Ratio (LDR), Independent Commissioner Proportion, Net Interest Margin (NIM), Capital Adequacy Ratio (CAR), and Profit Growth of Bank J Trust Indonesia in 2009-2014 are:  
a. Non-Performing Loan (NPL) had declined from 13.57% in 2009, to the lowest value of 3.15% in 2012, then increased to 5.90% in 2014.  
b. Loan to Deposit Ratio (LDR) is fluctuated from 2009 until 2014. Starting from 57.46% in 2009, decreased to the lowest value of 56.32% in 2010. The ratio is increased to the highest value of 87.63% in 2013 before it get decreased again to 65.61% in 2014.  
c. Independent Commissioner Proportion is decreased 66.67% in 2009 to 50% in 2011. The ratio is increased to 66.67% in 2012 then decreased to 50% in 2014.  
d. Net Interest Margin (NIM) is fluctuated from 2009 until 2014. Starting from 0.75% in 2009, increased to the highest value of 3.05% in 2012. The ratio is decreased to the lowest value of 0.44% in 2014.  
e. Capital Adequacy Ratio (CAR) is fluctuated from 2009 until 2014. Starting from 10.02% in 2009, increased to 11.16% in 2010, then decreased to the lowest value of 9.41% in 2011. The ratio is increased to the highest value of 14.03% in 2013, then decreased to 13.65% in 2014.
f. Profit Growth is fluctuated from 2009 until 2014. Starting from the highest value of 103.65% in 2009, decreased to -17.90% in 2010, then increased to the 19.49% in 2011. The ratio is decreased to the lowest value of -880.28% in 2013, then increased to 41.73% in 2014.

2. The rating of Non-Performing Loan (NPL), Loan to Deposit Ratio (LDR), Independent Commissioner Proportion, Net Interest Margin (NIM), Capital Adequacy Ratio (CAR), and Profit Growth of Bank J Trust Indonesia in 2009-2014 are:
   a. Non-Performing Loan (NPL) has 3 (three) times “healthy” predicate for 4.59% in 2011, 3.15% in 2012, and 3.97% in 2013; and 3 (three) times “unhealthy” predicate for 13.57% in 2009, 6.48% in 2010, and 5.90% in 2014.
   b. Loan to Deposit Ratio (LDR) has 3 (three) times “healthy” predicate for 81.76% in 2009, 83.96% in 2011, and 82.81% in 2012; and 3 (three) times “unhealthy” predicate for 70.86% in 2010, 96.31% in 2013 and 71.14% in 2014.
   c. Independent Commissioner Proportion has “healthy” predicate for the entire 6 years from 2009-2014.
   d. Net Interest Margin (NIM) has “very healthy” predicate for 3.05% in 2012; 2 (two) times “healthy enough” predicate for 1.62% in 2011 and 1.84% in 2013; “unhealthy” predicate for 1.19% in 2010; and 2 (two) times “not healthy” predicate for 0.75% in 2009 and 0.45% in 2014.
   e. Capital Adequacy Ratio (CAR) has 2 (two) times “healthy” predicate for 11.16% in 2010 and 14.03% in 2013; 2 (two) times “acceptable” predicate for 10.02% in 2009 and 10.09% in 2012; and 2 (two) times “unhealthy” predicate for 9.41% in 2011 and 13.58% in 2014.
   f. Profit Growth has 3 (three) times “positive” profit growth for 103.65% in 2009, 19.49% in 2011, and 41.73% in 2014; and 3 (three) times “negative” profit growth for -17.90% in 2010, -44.10% in 2012, and -99.28% in 2013.

3. The independent variables of Non-Performing Loan (NPL), Loan to Deposit Ratio (LDR), Independent Commissioner Proportion, and Capital Adequacy Ratio (CAR) simultaneously are not significant explanatory on the dependent variable of Profit Growth. Independent variables of Non-Performing Loan (NPL), Loan to Deposit Ratio (LDR), Independent Commissioner Proportion, and Capital Adequacy Ratio (CAR) have no partial significance influence to the dependent variable of Profit Growth. The research variable of Net Interest Margin (NIM) is not concluded in the F Test because the Net Interest Margin (NIM) is eliminated in the classical assumption test.

5.2 Suggestion

5.2.1 Theoretical Aspects
1. For the development of future research, researcher suggests to add more independent variables that suits the Profit Growth, such as Net Open Position (NOP), Net Operation Margin (NOM), Return on Assets (ROA), and Return on Earnings (ROE), and Operational Cost to Operational Income.
2. Researcher also suggests to increase the years of observation to get more sample size for the better results.

5.2.2 Practical Aspects
All the independent variables used in this research, which are NPL, LDR, Independent Commissioner Proportion, and CAR, simultaneously and partially have no significant influence towards Profit Growth. However, the management of Bank J Trust Indonesia is expected to perform a better performance in managing the financial ratio and the bank health level.

References