

## CHAPTER IV

### RESULT AND DISCUSSION

#### A. Description of Research Object

The object in this research are banks which are listed in Indonesian Stock Exchange and joined the evaluation process held by Indonesian Institute of Corporate Governance (IICG) with observation period 2012 – 2015. Total sample used in this research are 31 banks which is based on purposive sampling method.

**Table 4. 1 Sample Selection Procedure**

No.	Criteria	Total
1.	Total bank which joined the process held by IICG based on observation period 2012 – 2016	49
2.	Total bank which does not listed in Indonesian Stock Exchange	(12)
3.	Total bank which is not provide complete data on financial report	(6)
<b>Total sample used in the research</b>		<b>31</b>

## B. Instrument and Data Testing

### 1. Descriptive Statistic

Descriptive statistic test is used to describe the condition of the data of each variable used in the research. The variables used are Credit Risk (CR), Market Risk (MR), Liquidity Risk (LR), Remuneration (RM), Corporate Governance (CG) and Firm Performance (FP). The observation in descriptive statistic includes minimum, maximum, mean and standard deviation of the data.

**Table 4. 2 Result of Descriptive Statistic**

	N	Minimum	Maximum	Mean	Std. Deviation
Credit Risk	31	-5.78	-3.20	-4.1370	0.74176
Market Risk	31	0.0400	0.0855	0.058081	0.0130335
Liquidity Risk	31	0.6860	1.00886	0.883584	0.0970988
Remuneration	31	24.27	26.43	25.5315	0.61519
Corporate Governance	31	81.61	93.29	86.9642	3.15651
Firm Performance	31	0.0020	0.0515	0.027900	0.122679
Valid N (listwise)	31				

Source: Data Processing, 2017

From the descriptive statistic table above, credit risk variable (CR) has mean -4.137. The standard deviation is 0.74176 which means that the variation of data is low. The minimum value of credit risk is -5.78 which is obtained by PT Bank Permata Tbk in 2013 while the maximum value of credit risk is -3.20 which is obtained by PT Bank Tabungan Negara Tbk in 2012.

From the data, it can be described that market risk variable (MR) has mean 0.058081. The standard deviation is 0.130335 which means that the variation of data is low. The minimum value of market risk is 0.0400 which is obtained by PT Bank Permata Tbk in 2015 while the maximum value of market risk is 0.855 which is obtained by PT Bank Rakyat Indonesia Tbk in 2013.

Furthermore, liquidity risk variable (LR) has mean 0.883584. The standard deviation is 0.0970988 which means that the variation of data is low. The minimum value of liquidity risk is 0.6860 which is obtained by PT Bank Central Asia Tbk in 2012 while the maximum value of liquidity risk is 1.0886 which is obtained by PT Bank Tabungan Negara Tbk in 2014.

Moreover, remuneration variable (RM) has mean 25.5315. The standard deviation is 0.61519 which means that the variation of data is low. The minimum value of remuneration is 24.27 which is obtained by PT Bank Tabungan Negara Tbk in 2014 while the maximum value of

remuneration is 26.43 which is obtained by PT Bank Central Asia Tbk in 2014.

In addition, corporate governance variable (RM) has mean 86.9642. The standard deviation is 3.15651 which means that the variation of data is low. The minimum value of corporate governance is 81.61 which is obtained by PT Bank Permata Tbk in 2015 while the maximum value of corporate governance is 93.29 which is obtained by PT Bank Mandiri Tbk in 2015.

Finally, firm performance variable (FP) has mean 0.27900. The standard deviation is 0.122769 which means that the variation of data is low. The minimum value of firm performance is 0.0020 which is obtained by PT Bank Permata Tbk in 2015 while the maximum value of firm performance is 0.515 which is obtained by PT Bank Rakyat Indonesia Tbk in 2012.

## **2. Normality Test**

Normality test is used to test whether the distribution of the residuals are distributed normally. This research uses One Sample Kolmogrov-Smirnov (K-S) to test the normality of the data. Here is the result of the normality test:

**Table 4. 3 Result of One-Sample Kolmogorov-Smirnov Test**

		Unstandardized Residual
N		31
Normal Parameters <sup>a,b</sup>	Mean	0.0000000
	Std. Deviation	0.00382120
Most Extreme Differences	Absolute	0.144
	Positive	0.120
	Negative	-0.144
Kolmogrov-Smirnov Z		0.800
Asymp. Sig. (2-tailed)		0.544

Source: Data Processing, 2017

From the table above, the Asymp. Sig. (2-tailed) value is 0.544. The result show that value Asymp. Sig. (2-tailed) is more than 0.05 which means that the residuals are distributed normally. Thus, the data can be used for the research.

### 3. Auto-Correlation Test

Auto-correlation test is used to test in a regression model whether there is relation between t period and t-1 period. Thus, there must be no correlation between them. This research uses Durbin Watson to test the correlation of the data

**Table 4. 4 Result of Auto-Correlation Test**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.950 <sup>a</sup>	0.903	0.884	0.0041859	1.789

Source: Data Processing, 2017

From the table above, the value of Durbin Watson is 1.789. Total data (n) is 31, the total independent variable (k) is 5 and  $\alpha = 5\%$ . The value of Durbin Watson 1.789 is between the limit -2 and +2. Thus, it can be concluded that the regression model doesn't contain auto-correlation.

#### **4. Multicollinearity Test**

Multicollinearity test is used to test whether there is a relationship between the independent variables in a regression model. The value of the multicollinearity test can be seen in tolerance value and variance information factor (VIF). This research uses the tolerance value  $> 0,10$  and the VIF value  $< 10$ . Here is the result of multicollinearity test:

**Table 4. 5 Result of Multicollinearity Test**

Variables	Tolerance	VIF	Information
Credit Risk	0.426	2.347	Doesn't contain multicollinearity
Market Risk	0.451	2.219	Doesn't contain multicollinearity
Liquidity Risk	0.317	3.152	Doesn't contain multicollinearity
Remuneration	0.158	6.333	Doesn't contain multicollinearity
Corporate Governance	0.358	2.790	Doesn't contain multicollinearity

Source: Data Processing, 2017

From the table above, the result show that all of the variables have tolerance value more than 0.1 and the VIF value less than 10. Credit Risk variable (CR) has tolerance value 0.426 and VIF value 2.347. Market Risk variable (MR) has tolerance value 0.451 and VIF value 2.219. Liquidity Risk variable (LR) has tolerance value 0.317 and VIF value 3.152. Remuneration variable (REM) has tolerance value 0.158 and VIF value 6.333. Corporate Governance variable (CG) has tolerance value 0.358 and VIF value 2.790. Thus, it can be concluded that the regression model doesn't contain multicollinearity.

## 5. Heteroscedasticity Test

Heteroscedasticity test is used to test whether there is a different variance from one residual observation to others in a regression model. This research uses Glejser test to test the variance from the residual observation. Here is the result of heteroscedasticity test:

**Table 4. 6 Result of Heteroscedasticity Test**

Variables	Sig.	Threshold	Information
Credit Risk	0.169	> 0.05	Doesn't contain heteroscedasticity
Market Risk	0.302	> 0.05	Doesn't contain heteroscedasticity
Liquidity Risk	0.897	> 0.05	Doesn't contain heteroscedasticity
Remuneration	0.283	> 0.05	Doesn't contain heteroscedasticity
Corporate Governance	0.563	> 0.05	Doesn't contain heteroscedasticity

Source: Data Processing, 2017

From the table above, the result shows the significance value of each independent variable. The significance value of Credit Risk (CR) is 0.169, Market Risk (MR) is 0.302, Liquidity Risk (LR) is 0.897, Remuneration (RM) is 0.283 and Corporate Governance (CG) is 0.563. All of the variables have significance value more than 0.05. Thus, it can be concluded that the regression model doesn't contain heteroscedasticity.



## C. Hypothesis Testing

### 1. t-Test

Here is the result of t-Test:

**Table 4. 7 Result of t-Test**

Model		Unstandardized Coefficients		Sig.
		B	Std. Error	
1	(Constant)	-0.039	0.069	0.574
	Credit Risk	-.006	0.002	0.001
	Market Risk	0.836	0.092	0.000
	Liquidity Risk	-0.022	0.014	0.137
	Remuneration	-0.005	0.003	0.173
	Corporate Governance	0.002	0.000	0.001

Source: Data Processing, 2017

$$FP = -0.039 - 0.006LnCR + 0.836MR - 0.022LR - 0.005LnREM + 0.002CG + e$$

From the table above, there are some hypotheses that can be concluded:

#### a. Hypothesis 1

The regression coefficient of credit risk is negative and the significance value is 0.001 less than alpha 0.05. It means that credit risk negatively influences firm performance. Thus, the first hypothesis

(H<sub>1</sub>) which stated credit risk has a negative influence toward bank performance is accepted.

b. Hypothesis 2

The regression coefficient of market risk is positive and the significance value is 0.000 less than alpha 0.05. It means that market risk positively influences firm performance. Thus, the second hypothesis (H<sub>2</sub>) which stated market risk has a positive influence toward bank performance is accepted.

c. Hypothesis 3

The regression coefficient of liquidity risk is negative and the significance value is 0.137 more than alpha 0.05. It means that liquidity risk doesn't have any influence toward firm performance. Thus, the third hypothesis (H<sub>3</sub>) which stated liquidity risk has a positive influence toward bank performance is rejected.

d. Hypothesis 4

The regression coefficient of remuneration is negative and the significance value is 0.173 more than alpha 0.05. It means that remuneration negatively doesn't have any influence toward firm performance. Thus, the fourth hypothesis (H<sub>4</sub>) which stated remuneration has positive influence toward bank performance is rejected.

e. Hypothesis 5

The regression coefficient of corporate governance is positive and the significance value is 0.001 less than alpha 0.05. It means that corporate governance positively influences firm performance. Thus, the fifth hypothesis (H<sub>5</sub>) which stated corporate governance has a positive influence toward bank performance is accepted.

## 2. F-Test

Here is the result of F-test:

**Table 4. 8 Result of F-Test**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.004	5	0.001	46.434	0.000 <sup>a</sup>
	Residual	0.000	25	0.000		
	Total	0.005	30			

Source: Data Processing, 2017

From the table above, the result shows that the *f* table is 46.434 and the significance value is 0.000. The *f* table 46.434 is more than *f* arithmetic 2.60 and the significance value is less than 0.05. Thus, it can be concluded that the independent variables simultaneously affect the dependent variable.

## 3. Coefficient Determination Test

Here is the result of coefficient determination test:

**Table 4. 9 Result of Coefficient Determination Test**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.950 <sup>a</sup>	0.903	0.884	0.0041859	1.789

Source: Data Processing, 2017

From the table above, the adjusted R square is 0.884 or 88.4%. It means that the dependent variable (Firm Performance) can be explained by the independent variables (Credit Risk, Market Risk, Liquidity Risk, Remuneration, and Corporate Governance). The other 11.6% is explained by other variables which is not contain in the model.

## **D. Interpretation**

### **1. The Effect of Firm Risk on Bank Performance**

In this research, firm risk variable consists of credit risk, market risk and liquidity risk. According to hypothesis testing, credit risk and market risk variables are accepted while liquidity risk variable is rejected.

#### **a. The Effect of Credit Risk on Bank Performance**

According to hypothesis testing, credit risk is proven to have a negative and significance influence toward bank performance. Credit risk is defined as the likelihood that the debtor can't fulfill their obligation in accordance with agreed terms and conditions (Apanga et.al, 2016). If the numbers of debtor who can't pay their obligation

increase, it means that the bank has to bear more losses and their daily operation will be affected. According to *Peraturan Bank Indonesia Nomor 17 Tahun 2015*, the limit of non-performing loan ratio is 5%. The high number of non-performing loan will decrease bank's profitability and equity (Ekinici, 2016).

The clear example can be seen from PT Bank Permata Tbk in 2017 when they had to suffer financial loss due to inability of their debtor to pay. As what had been reported by *Katadata*, Garasindo Group who is one of the Permata Bank's debtors, has total non-performing loan in the bank as much as Rp 1,24 billion. This huge number of non-performing loan led Permata Bank's NPL ratio to increase from 2.7% in 2015 to 8.8% in 2016. As a result, the bank had to bear losses with total amount of Rp 6,48 billion in 2016. Furthermore, the profitability of the bank also decreases. In 2015, the return on asset ratio of Permata Bank was 0.20%. The contradictory situation happened in 2016 when their ratio decrease to -4.90%. This number of losses is one of the biggest losses that ever happened in Indonesia's banking industry. The result of this research is in line with other researches that were done by Arif and Anees (2012), Purwoko and Sudiyatno (2013), Margaretha and Zai (2013) and Ekinici (2016).

b. The Effect of Market Risk on Bank Performance

According to hypothesis testing, market risk is proven to have a positive and significance influence toward bank performance. Market

risk is defined as risk in liquid portfolio arising from market prices' movements and consisting of commodity risks, currency, equity and interest rate (Ekinci, 2016). Interest rate is one of the main parts which cause market risk. Here, market risk is proxied by net interest margin divided by total productive asset (NIM). The higher NIM value, the higher bank performance is. It is because the largest portion of the bank's operating income comes from the credit activity. The credit activity of the bank has strong relation with the interest rate which is employed in agreed terms and conditions of the credit activity. As a result, a high interest rate will increase their net interest margin. Moreover, if the management is able to place their assets in the form of credit efficiently, they will also derive a high number of net interest margins. Thus, their income will increase and lead to better performance of the bank. The result of this research is in line with other researches that were done by Purwoko and Sudiyatno (2013), Margaretha and Zai (2013) and Ekinci (2016).

c. The Effect of Liquidity Risk on Bank Performance

According to hypothesis testing, liquidity risk doesn't have any influence on bank performance. It means that the third hypothesis which stated that liquidity risk positively influence bank performance is rejected. The high number of LDR doesn't mean that the bank performance is in a good situation. This condition can happen because LDR isn't the only factor which affects bank performance. The other

two factors that have strong relation with LDR are the bank's credit quality and the number of non-performing loan. The high number of LDR, if it doesn't supported by a good credit quality, it will have no influence on bank performance. Liquidity risk is proxied by total loan divided by third party funds. It shows the ability of bank to giving loan by using the third party funds. The more loans distributed means that the risk of non-performing loan will increase. Thus, if the bank doesn't pay attention to their credit quality and the number of non-performing loan, the high number of LDR means nothing to the bank performance. On the contrary, it may decrease their performance. One of the examples is come from PT Bank Negara Indonesia. On 2014, their LDR ratio was 87.80% and then increased to 90.40% on 2015. On the other hand, their performance which is measured by ROA was respectively decreased from 3.49% to 2.60%. This condition shows that liquidity risk has no influence in increasing bank performance. Moreover, the increase of it can decrease their performance. This is in line with the regression coefficient of LDR which shows a negative direction.

According to *Bank Indonesia*, the threshold of loan to deposit ratio is 92%. If the LDR ratio is more than 92%, it means that the bank has a bad liquidity since function of banks as fund distributor cannot fully performed. It is because the third party funds can't cover the credits that are going to distribute to the public. As a result, they

have to use the call money to cover the deficiency. However, they can't use call money at any time. Thus, if this kind of situation happened, the bank performance is at stake. The result of this research is in line with other researchers that were done by Purwoko and Sudiyatno (2013), Ongore and Kusa (2013), Putri (2015) and Septiani and Lestari (2016).

## **2. The Effect of Remuneration on Bank Performance**

According to hypothesis testing, the result shows that remuneration variable is rejected. It means that remuneration has no influence on bank performance. Under the goal alignment argument (Devers et.al, 2007), the incentive pay will reduce the opportunism of the directors by motivating them to maximize firm performance. However, there is still goal misalignment in the incentive pay. The remuneration package that is given to the directors can't fully align their interest with the bank shareholder. The nature of high risk in banking industry will provoke the directors to take a high risk in order to get a high return. The excessive risk-taking which is done by the management is one of the ways so that they can get a bonus from their performance. However, these actions will alter their focus on long-term goals to the short-term goals as it can benefit their personal gain. As a result, they usually neglect the long-term goals and the bank performance. Thus, the remuneration package doesn't have any relation with the bank performance.



### **3. The Effect of Corporate Governance on Bank Performance**

According to hypothesis testing, the result shows that corporate governance variable is accepted. It means that corporate governance has positive influence on bank performance. By having good corporate governance, the shareholders can oversight the management effectively. The monitoring effect also can enhance the corporate transparency and control of the banks' operation. It makes the bank can improve the compliance with regulation and business ethics applicable in banking industry. Moreover, it can also reduce the agency problem that happens between shareholders and management so they will have same interest to maximize the bank performance. As a result, all of the component in the bank can operate effectively and efficiently. The efficient corporate governance practices can gain and retain public trust. This will lead to a better performance of the bank. The result of this research is in line with other researches that were done by Utama and Musa (2011), Pasic et.al (2016), Orazalin et.al (2016) and Dong at.al (2016).