# CHAPTER IV RESULT AND DISCUSSION

#### A. Research Object/Subject Description

This research uses all banking companies that listed in Bursa Efek Indonesia (BEI or IDX), Bursa Malaysia (BM), Philippines Stock Exchange (PSE), and Stock Exchange of Thailand (SET) in the period year 2015 until 2017 as the sample.

The data used in this research was taken from the Bursa Efek Indonesia website (<u>www.idx.com</u>), Bursa Malaysia website (<u>www.bursamalaysia.com</u>), Philippines Stock Exchange website (<u>www.pse.com.ph</u>), Stock Exchange of Thailand (<u>www.set.or.th</u>), each bank's website and also Yahoo Finance (<u>https://finance.yahoo.com</u>).

Purposive sampling technique used in this research so all of the companies should be fit the criteria. The samples used in this research consist of 36 companies in Indonesia, 30 companies in Malaysia, 27 companies in Phillippines, and 30 companies in Thailand.

The procedure for selecting the sample is presented in Table 4.1

until Table 4.4.

Table 4.1Sample Selection Procedure in Indonesia					
No.	Description	Total			
1	Banking Companies listed in Bursa Efek Indonesia (BEI) in 3 years (2015 - 2017)	129			
2	Banking Companies that didn't issue the audited annual report in 3 years (2015-2017)	(36)			
3	Banking Companies that didn't disclose intangible asset in 3 years (2015-2017)	(51)			
4	Outlier Data	(6)			
	Total Sample	36			

Indonesia has 129 sample companies listed in Bursa Efek Indonesia (www.idx.com) from 2015 until 2017. However, 36 sample companies did not issue an audited annual report in the time period of 3 years. Then, 51 sample companies did not disclose their intangible asset in the annual report and as many as 6 companies have data with extreme values which then become outliers. Thus, it makes the total samples for Indonesia are 36 sample banking companies.

Sample Selection Procedure in Malaysia					
No.	Description	Total			
1	Banking Companies listed in Bursa Malaysia in 3 years (2015 - 2017)	48			
2	Banking Companies that didn't issue the audited annual report in 3 years (2015-2017)	(18)			
3	Banking Companies that didn't disclose intangible asset in 3 years (2015-2017)	(0)			
4	Outlier Data	(0)			
	Total Sample	30			

Table 4.2

From Table 4.2, Malaysia has 48 sample banking companies listed in Bursa Malaysia (<u>www.bursamalaysia.com</u>) from 2015 until 2017. However, 18 of sample companies did not issue an audited annual report in the time period of 3 years. Thus, it makes the samples of Malaysia are 30 sample companies.

No.	Description	Total
1	Banking Companies listed in Philippines Stock Exchange in 3 years (2015 - 2017)	51
2	Banking Companies that didn't issue the audited annual report in 3 years (2015-2017)	(21)
3	Banking Companies that didn't disclose intangible asset in 3 years (2015-2017)	(0)
4	Outlier Data	(3)
	Total Sample	27

Table 4.3Sample Selection Procedure in Philippines

From the Table 4.3, Philippines has 51 sample banking companies listed in Philippines Stock Exchange (<u>www.pse.com</u>) from 2015 until 2017. However, 21 of sample companies did not issue an audited annual report in the time period of 3 years and as many as 6 companies have data with extreme values which then become outliers. Thus, it makes the samples of Philippines are 27 sample companies.

No.	Description	Total
1	Banking Companies listed in Stock Exchange of Thailand in 3 years (2015 - 2017)	30
2	Banking Companies that didn't issue the audited annual report in 3 years (2015-2017)	(0)
3	Banking Companies that didn't disclose intangible asset in 3 years (2015-2017)	(0)
4	Outlier Data	(0)
	Total Sample	30

Table 4.4Sample Selection Procedure in Thailand

Thailand has 30 sample banking companies listed in Stock Exchange of Thailand (<u>www.set.or.th</u>) from 2015 until 2017. All the sample companies fit the criteria. Thus, it makes the samples of Thailand are 30 sample companies.

## **B.** Instrument and Data Testing

## 1. Descriptive Statistics Test

In this study, the descriptive statistics test is used to describe the condition of the data of each variable used in the research. The test provides observations about the total of data, minimum value, maximum value, mean, and standard deviation of the data from an independent variable and dependent variables. Descriptive statistical results from VAIC, Market to Book Value, and Z-Score Index are presented in Table 4.5 until Table 4.8.

Indonesia						
	Ν	Minimum	Maximum	Mean	Std. Deviation	
VAIC	36	1,5	15,54	6,4101	3,11933	
MV	36	59,42	33898,79	6053,1176	750,697,092	
ZSCORE	36	2,36	11,47	5,6407	24,6994	
Valid N (listwise)	36					

Table 4.5 Descriptive Statistics Test Result

Source : SPSS' Output

From Table 4.5 above shows that there are 36 companies used as the sample in Indonesia. VAIC as the measurement of Intellectual Capital has minimum value 1,5 and maximum value 15,54. The average of the variable is 6,4101 while its standard deviation is 3,11933. This shows that VAIC variable data identifies good results because the standard deviation value is smaller than the average value. MV or firm value variable that obtained from Market to Book Value (M/B) has the minimum value 59,42 while its maximum value is 33898,79. The average value of MV variable is 6053,1176 and the standard deviation is 750,697,092. This shows that MV variable data identifies good results because the standard deviation value is smaller than the average value. Variable risk of financial distress that used in this research is ZSCORE (Z-Score Index) that has minimum value 2,36 with the maximum reaches 11,47. The average of this variable is 5,6407 and the standard deviation is 24,6994. The average value smaller than the standard deviation value broadly identifies the data as having relatively high variance.

Malaysia					
	Ν	Minimum	Maximum	Mean	Std. Deviation
VAIC	30	1,25	50,65	9.1852	12,78463
MV	30	,66	250,10	38,2951	53,43991
ZSCORE	30	1,56	89,40	15,0588	18,51450
Valid N (listwise)	30				

Table 4.6 Descriptive Statistics Test Result Malaysia

Source : SPSS' Output

Table 4.6 above shows that the sample in Malaysia consists of 30 companies. Intellectual Capital measured with VAIC has the minimum value 1,25 and the maximum value is 50,65. The average of the variable is 9,1852 while the standard deviation is 12,78463. The value of the standard deviation that is higher than the average value shows that the Intellectual Capital variable data identifies poor results which have a relatively high variance. For the Firm Value (MV) measured with M/B has minimum value 0,66 while maximum value is 250,10. The mean of MV is 38,2951 with the standard deviation 53,43991. This shows that the MV variable data identifies unfavorable results because the standard deviation value is higher than the average value. Risk of Financial Distress measured with Z-Score Index has 1,56 in minimum value and 89,40 maximum value. The standard deviation of Z-Score is 18,51450 with the average value in the amount of 15,0588.

Philippines						
	Ν	Minimum	Maximum	Mean	Std. Deviation	
VAIC	27	1,94	236,64	57,4190	71,69724	
MV	27	40,11	412,13	161,1261	112,49941	
ZSCORE	27	8,09	18,08	13,3478	2,85830	
Valid N (listwise)	27					

Table 4.7 Descriptive Statistics Test Result Philippines

Source : SPSS' Output

Based on Table 4.7, the sample used in Phillippines is 27 companies. VAIC has the minimum value 1,94 and the maximum value is 236,64. The average of the variable is 57,4190 while the standard deviation is 71,69724. This shows that the VAIC variable data identifies unfavorable results because the standard deviation value is higher than the average value. For the Firm Value (MV) measured with M/B has minimum value 40,11 while maximum value is 412,13. The mean of MV is 161,1261 with the standard deviation 112,49941. The standard deviation value that is lower than the average value shows good results and in general, the data has a relatively small variance so that the data distribution is relatively the same / stable. Risk of Financial Distress measured with ZSCORE (Z-Score Index)has 8,09 in minimum value and 18,08 maximum value. The standard deviation of ZSCORE is

2,85830 with the average value in the amount of 13,3478. The average value which is much higher than the standard deviation value indicates that the data has a relatively small variance so that the data distribution is relatively the same.

Thailand					
	Ν	Minimum	Maximum	Mean	Std. Deviation
VAIC	30	-,23	5,30	3,549	1,48734
MV	30	2,28	32,16	7,781	8,45374
ZSCORE	30	1,48	193,16	31,0192	52,7889
Valid N (listwise)	30				

Table 4.8 Descriptive Statistics Test Result Thailand

Source : SPSS' Output

Table 4.8 above shows that there are 30 companies used as samples in Thailand. VAIC as the measurement of Intellectual Capital has minimum value -,23 and maximum value 5,30. The average of the variable is 3,549 while its standard deviation is 1,48734 which means that the variation of data is low. MV or firm value variable that obtained from Market to Book Value has the minimum value 2,28 while its maximum value is 32,16. The average value of MV variable is 7,781 and the standard deviation is 8,45374. The standard deviation value that is higher than the average value indicates that the MV variable data identifies unfavorable results.

Variable risk of financial distress that measured by ZSCORE (Z-Score Index) has minimum value 1,48 with the maximum reaches 193,16. The average of this variable is 31,0192and the standard deviation is 52,7889 which means that the variation of data is high.

## 2. Classical Assumption Test

Classical assumption test is needed as one of the requirements for conducting regression analysis data, where the regression analysis can only be done when fulfilling the classical assumption test. The classical assumption tests used in this research are the Normality Test, Autocorrelation Test, Heteroscedasticity Test, and Multicollinearity Test.

## a. Normality Test

Normality test is used for determining the collected data whether it distributed normally or taken from the normal population. Classical method used in this study is One Simple Kolmogorov-Smirnov (K-S) against unstandardized residual regression results with the following criteria:

- Probability value > 5% or 0,05 then the data distribution is said to be normal.
- Probability value < 5% or 0,05 then the data distribution is said to be abnormal.

Based on the tests carried out using the Kolmogorov-Smirnov (K-S) Test the results of the normality these were obtained in Table 4.9.

Table 4.9
Normality Test Result
Firm Value and Risk of Financial Distress Dependent Variable
Indonesia Malaysia Phillippines and Thailand

indonesia, wiałaysia, i imppines, and i nanand						
Variables	Asymp. Sig. (2-tailed)					
MV - Indonesia	,132					
ZSCORE - Indonesia	,299					
MV - Malaysia	,065					
ZSCORE - Malaysia	,326					
MV - Philippines	,106					
ZSCORE - Philippines	,662					
MV - Thailand	,470					
ZSCORE - Thailand	,470					
ZSCORE - Malaysia MV - Philippines ZSCORE - Philippines MV - Thailand	,326 ,106 ,662 ,470					

Source: SPSS' Output

The table is the result of the normality test for MV (Firm Value) and ZCORE (Risk of Financial Distress) dependent variable in Indonesia, Malaysia, Philippines, and Thailand. Based on the table, the test of Indonesia MV variable which uses the Kolmogorov-Smirnov (K-S) Test shows that the data is normally distributed. It is strengthened by Asymp. Sig. (2-tailed) that reached 0,132. The value is greater than the alpha value (0,05). For ZSCORE (Risk of Financial Distress) dependent variable in Indonesia has Asymp. Sig. (2-tailed) in the amount of 0,299. The value is greater than the alpha value (0,05). Based on the test, it can be concluded that the regression model for Indonesia complies the normality assumption.

Meanwhile, the test result for MV (Firm Value) and ZSCORE (Risk of Financial Distress) dependent Variable in Malaysia. The test which uses the Kolmogorov-Smirnov (K-S) Test shows that the data is normally distributed. The Asymp. Sig. (2tailed) values of MV and ZSCORE are 0,065 and 0,326. Both are greater than the alpha value (0,05). Thus, based on the test it can be concluded that the regression model for Malaysia complies the normality assumption.

The result of the normality test for MV (Firm Value) and ZSCORE (Risk of Financial Distress) dependent variable in Phillippines and Thailand also shows that the data is normally distributed. For Phillippines, the Asymp. Sig. (2-tailed) value of MV and ZSCORE are 0,106 and 0,662 which means that greater than the alpha value (0,05). The MV and ZSCORE in Thailand have the Asymp. Sig. (2-tailed) in the amount of 0,470 and 0,470 which means that greater than the alpha value (0,05). Therefore, based on the test, it can be concluded that the regression model for Phillippines and Thailand complies the normality assumption.

#### **b.** Autocorrelation Test

Autocorrelation test is used to find out the classical autocorrelation deviation of the data in the regression model, that is the correlation between two residuals on an observation with another observation. The testing method used is Durbin Watson Test (D-W Test), Lag, and Runs Test to test the correlation of the data. The result of the autocorrelation test can be seen from Table below:

<b>Table 4.10</b>
Autocorrelation Test Result
Firm Value and Risk of Financial Distress Dependent Variable
Indonesia, Malaysia, Phillippines, and Thailand

Model	Testing Method	Result
MV - Indonesia	Lag	DW = 1,995
ZSCORE - Indonesia	Durbin Watson	DW = 1,850
MV - Malaysia	Durbin Watson	DW : 1,664
ZSCORE - Malaysia	Durbin Watson	DW = 1,621
MV - Philippines	Runs Test	Asymp. Sig. $(2\text{-tailed}) = 0,118$
ZSCORE - Philippines	Durbin Watson	DW = 1.808
MV - Thailand	Runs Test	Asymp. Sig. $(2\text{-tailed}) = 0,193$
ZSCORE - Thailand	Durbin Watson	DW = 2,077

Source: SPSS' Output

In Table 4.10 for MV (Firm Value) dependent variable in Indonesia uses Lag Test to test the autocorrelation and get the value of Durbin Watson (DW) is 1,995. The provisions of the test are dU<DW<4-dU which means that the Durbin Watson Value must be greater than the value of dU and must be smaller than the 4-dU value. Based on the Durbin Watson table for 36 samples with 1 variable, the dU value is 1,5245. Then, it makes the 4-dU value for this research is 2,4755. The test result shows there is no autocorrelation in this regression model because of dU<DW<4-dU or 1,5245<1,995<2,4755.

The used testing method for ZSCORE (Risk of Financial Distress) dependent variable in Indonesia is the Durbin Watson Test (D-W Test). The provisions of the test are dU<DW<4-dU which means that the Durbin Watson Value must be greater than the value of dU and must be smaller than the 4-dU value. The value of Durbin

Watson (DW) for ZSCORE dependent variable in Indonesia is 1,850. Based on the Durbin Watson table for 36 samples with 1 variable, the dU value is1,5245. Then, it makes the 4-dU value for this research is 2,4755. The test result indicates there is no autocorrelation in this regression model because of dU < DW < 4-dU or 1,5245<1,850<2,4755.

MV (Firm Value) and ZSCORE (Risk of Financial Distress) dependent variable in Malaysia used Durbin Watson Test and get the value of Durbin Watson (DW) of both dependent variable are 1,664 and 1,621. Based on the Durbin Watson table for 30 samples with 1 variable, the dU is 1,4894. Then, it makes the 4-dU value for this research is 2,5106. For the MV (Firm Value), the test result indicates that there is no autocorrelation in regression model because of dU<DW<4-dU or 1,4894<1,664<2,5106. The test result ZSCORE (Risk of Financial Distress) also indicates that there is no autocorrelation model because of dU<DW<4-dU or 1,4894<1,664<2,5106.

For the MV (Firm Value) dependent variable in Phillippines used Runs Test. The requirement of this testing method is the value of Asymp. Sig. (2-tailed) should be greater than the alpha value (0,05). From the test result shows that Asymp. Sig. (2-tailed) of MV is 0,118 which means greater than the alpha value (0,05). Thus, it can be concluded that there is no autocorrelation in this regression model.

The used testing method for ZSCORE (Risk of Financial Distress) dependent variable in Phillippines is the Durbin Watson Test (D-W Test). Based on the Durbin Watson table for 27 samples with 1 variable, the dU value is 1,4688. Then, it makes the 4-dU value for this research is 2,5312. The test result indicates there is no autocorrelation in this regression model because of dU<DW<4-dU or 1,4688<1,808<2,5312.

For the MV (Firm Value) dependent variable in Thailand used Runs Test. The requirement of this testing method is the value of Asymp. Sig. (2-tailed) should be greater than the alpha value (0,05). From the test result shows that Asymp. Sig. (2-tailed) of MV is 0,193 which means greater than the alpha value (0,05). Thus, it can be concluded that there is no autocorrelation in this regression model.

The ZSCORE (Risk of Financial Distress) dependent variable in Thailand used Durbin Watson Test (D-W Test). Based on the Durbin Watson table for 30 samples with 1 variable, the dU value is 1,4894. Then, it makes the 4-dU value for this research is 2,5106. The test result indicates that there is no autocorrelation in this

## c. Heteroscedasticity Test

Heteroscedasticity test is used to find out the variance differences from the residual for researching all regression models. Heteroscedasticity Test is used to discover the deviation from classical assumption conditions in the regression model, where heteroscedasticity have to be fulfilled. This research used Glejser Test, Spearman Test, White Test, and Park Test to test the variance from the residual. Below is the result of heteroscedasticity test :

Table 4.11Heteroscedasticity Test ResultFirm Value and Risk of Financial Distress Dependent VariableIndonesia, Malaysia, Phillippines, and Thailand

Model	Method	Result
MV – Indonesia	Spearman Test	Sig. $(2-tailed) = ,057$
ZSCORE – Indonesia	Glejser Test	,896
MV – Malaysia	Glejser Test	,264
ZSCORE – Malaysia	White Test	R square = $,415$
MV – Philippines	Spearman's rho Test	Sig. $(2-tailed) = ,066$
ZSCORE – Philippines	Glejser Test	,243
MV – Thailand	Park Test	,114
ZSCORE – Thailand	Park Test	,114

Source: SPSS' Output

Table 4.11 shows the result of heteroscedasticity test for MV

(Firm Value) dependent variable in Indonesia. The heteroscedasticity test is using Spearman rho which the provision is the sig. (2-tailed) should more than alpha (0,05). From the table can be seen that sig. (2-

tailed) shows the amount of 0,057 which is greater than the alpha value (0,05). From the result, it can be concluded that there is no heteroscedasticity in this regression.

The heteroscedasticity test for ZSCORE (Risk of Financial Distress) dependent variable in Indonesia is using Glejser Test with the provision significance value should be more than alpha (0,05). The significance value of VAIC shows 0,896 which is greater than alpha (0,05). Thus, it can be concluded that there is no heteroscedasticity found in this regression.

Then Glejser Test is also used to test the heteroscedasticity of MV (Firm Value) dependent variable in Malaysia. The provision of the test is the significance value should more than alpha (0,05). Based on the table, the significance value of VAIC shows 0,264 which is greater than the alpha value (0,05). From the test result, it can be concluded that there is no heteroscedasticity found in this regression. For the ZSCORE, the test is using White Test with the provision the value of Rsquare\*N > the probability value (chi-square). The result shows value of R square is 0,415 which is R square\*N = 0,415\*30 = 12,45. The probability value of the data is 5,991465 which is lower than 12,45. Therefore, it can be concluded that there is no heteroscedasticity found in the data. The result of heteroscedasticity test for MV (Firm Value) dependent variable in Phillippines. The heteroscedasticity test is using Spearman rho which the provision is the sig. (2-tailed) should be more than alpha (0,05). From the table can be seen that sig. (2-tailed) shows the amount of 0,066 which is greater than the alpha value (0,05). From the result, it can be concluded that there is no heteroscedasticity in this regression.

The heteroscedasticity test for ZSCORE (Risk of Financial Distress) dependent variable in Phillippines is using Glejser Test. The provision of the test is the significance value should be more than alpha (0,05). From the table, it shows that the significance value of VAIC shows 0,243 which is greater than alpha (0,05). Thus, it can be concluded that there is no heteroscedasticity found in this regression.

For MV (Firm Value) and ZSCORE (Risk of Financial Distress), the dependent variable in Thailand used Park Test which the requirement is the significance should be more than alpha (0,05). The park test was used by squaring the residual values then transformed into natural logarithm which was then regression. From the table, it can be seen that the significance value of MV (Firm Value) and ZSCORE (Risk of Financial Distress) are 0,144 and 0,144. Thus, from the result, it can be concluded that there is no heteroscedasticity in this regression.

## d. Multicollinearity Test

Multicollinearity test is used to ascertain whether there is a correlation between the independent variables in the regression model. This test is for the research with more than one independent variable. Multicollinearity test can be found by analyzing the tolerance and Variance-Inflation Factor (VIF) value. This research uses the tolerance value that has to fulfill the requirement > 0,10 and the VIF value should be <10. The result of multicollinearity test can be seen in Table below:

Table 4.12Multicollinearity Test ResultFirm Value and Risk of Financial Distress Dependent VariableIndonesia Malaysia Phillippines and Thailand

muonesia, Maiaysia, Emmppines, and Emanand			
Model	VIF	Tolerance	
MV - Indonesia	1,000	1,000	
ZSCORE - Indonesia	1,000	1,000	
MV - Malaysia	1,000	1,000	
ZSCORE - Malaysia	1,000	1,000	
MV - Philippines	1,000	1,000	
ZSCORE - Philippines	1,000	1,000	
MV - Thailand	1,000	1,000	
ZSCORE - Thailand	1,000	1,000	

Source: SPSS' Output

From the Table 4.12, the result shows that all the variable MV (Firm Value) and ZSCORE (Risk of Financial Distress) dependent variable in Indonesia, Malaysia, Philippines, and Thailand have VIF in the amount of 1,000 which is lower than 10 and the tolerance value is 1,000 which is higher than 0,1. Thus, it can be concluded that in the regression model there is no multicollinearity found.

## C. Research Results (Hypotheses Testing)

Hypotheses testing is undertaken to find out how the independent variable significance level influences the dependent variable. The hypothesis in this research was tested using Simple Regression Analysis namely through the Determinant Coefficient Test (R Square) and Significant Individual Test (T-Test).

## 1. Coefficient Determination Test (R Square)

Determination coefficient is declared in R square. Coefficient determination test is used to determine how far the ability of independent variable in explaining the dependent variable. The influence of the independent variable can be seen on the value of R Square or Adjusted R Square. Because this research uses a simple regression analysis model, the value to be used is the value of R Square. The results of the test coefficient of determination are presented in Table 4.13.

Table 4.13Coefficient Determination Test ResultFirm Value and Risk of Financial Distress Dependent VariableIndonesia Malaysia Phillippines and Thailand

Model	R Square
MV – Indonesia	,121
ZSCORE – Indonesia	,049
MV – Malaysia	,013
ZSCORE – Malaysia	,809
MV – Philippines	,029
ZSCORE – Philippines	,063
MV – Thailand	,777
ZSCORE – Thailand	,683

Source: SPSS' Output

Table 4.13 is the results of coefficient determination test for MV (Firm Value) and ZSCORE dependent variable in Indonesia, Malaysia, Philippines, and Thailand. Based on this table, the value of coefficient determination (R Square) of Indonesia MV Variable is 0,121. This result implies that 12,1% of the dependent variable can be clarified by the independent variable and the other 87,9% is explained by other factors out of the research. For ZSCORE variable the amount of coefficient determination (R Square) is 4,9% of the dependent variable can be clarified by the independent variable and the other 95,1% is explained by other factors out of the research.

Then, the value of coefficient determination for MV (Firm Value) in Malaysia is 0,013. This result implies that 1,3% of the dependent variable can be clarified by the independent variable and the other 98,7% is explained by other factors out of the research. For ZSCORE (Risk of Financial Distress) dependent variable has the coefficient determination in the amount of 0,809. It means that 80,9% of the dependent variable can be clarified by the independent variable and the other 19,1% is explained by other factors out of the research.

Based on the table, the result of the test gets the value of coefficient determination (R Square) for MV (Firm Value) dependent Variable in Phillippines in the amount of 0,029. This result implies that 2,9% of the dependent variable can be clarified by the independent variable and the other 97,1% is explained by other factors out of the research. For the ZSCORE (Risk of Financial Distress) dependent variable has the value of coefficient determination (R Square) in the amount of 0,063. This result implies that 6,3% of the dependent variable can be clarified by the independent variable and the other 93,7% is explained by other factors out of the research.

Meanwhile the result of coefficient determination test for MV (Firm Value) dependent Variable in Thailand. Based on this table, the value of coefficient determination (R Square) is 0,777. This result implies that 77,7% of the dependent variable can be clarified by the independent variable and the other 22,3% is explained by other factors out of the research. ZSCORE (Risk of Financial Distress) dependent variable has the coefficient determination (R Square) value 0,683. It means that 68,3% of the dependent variable can be clarified by the independent variable and the other 31,3% is explained by other factors out of the research,

#### 2. T-Test

The hypothesis testing was done with statistics software SPSS 15.0 versions. The test is undertaken through testing the regression equation individually to each dependent variable. Regression results are presented below:

## a) First Hypothesis

T-Test Result Firm Value Dependent Variable			
Indonesia			
	В	Beta	Sig.
(Constant)	697,943		
VAIC	835,430	,347	,038

**Table 4.14** 

Source : SPSS' Output

Table 4.14 above is the result of the T-Test for banking companies in Indonesia. VAIC variable has coefficient beta value 0,347 with significance 0,038 < alpha (0,05). The significance of the variable is lesser than the alpha value and beta value have a positive direction. Thus, it can be concluded that hypotheses  $H_{1a}$  is accepted.

> MV = 697,943 + 0,347 VAIC

**Table 4.15 T** Test Result Firm Value Dependent Variable Malaysia Beta Sig. В

			~-0.
(Constant)	42,740		
VAIC	-,484	-,116	,542

Source : SPSS' Output

L

Table 4.15 above is the result of the T-Test for banking companies in Malaysia. The table shows that VAIC variable has coefficient beta value -0,116 with significance 0,542> alpha (0,05). The significance of the variable is higher than the alpha value. Thus, it can be concluded that hypotheses  $H_{1b}$  is rejected.

<b>Table 4.16</b>
T Test Result
Firm Value Dependent Variable

Philippines				
	В	Beta	Sig.	
(Constant)	176,510			
VAIC	-,268	-,171	,394	

Source : SPSS' Output

Table 4.16 above is the result of the T-Test for banking companies in Phillippines. VAIC variable has coefficient beta value -0,171 with significance 0,394> alpha (0,05). The significance of the variable is higher than the alpha value. Thus, it can be concluded that hypotheses **H**<sub>1c</sub> is rejected.

MV = 176, 510 - 0, 171 VAIC

Table 4.17 T Test Result Firm Value Dependent Variable Thailand

	В	Beta	Sig.
(Constant)	142,089		
VAIC	-31,292	-,882	,000

Source : SPSS' Output

Table 4.17 above is the result of the T-Test for banking companies in Thailand. VAIC variable has coefficient beta value - 0,882 with significance 0,000< alpha (0,05). Even though significance is lower than alpha, beta value has a negative direction. Thus, it can be concluded that hypotheses  $H_{1d}$  is rejected.

b) Second Hypothesis

Table 4.18			
<b>T-Test Result</b>			
Risk of Financial Distress Dependent Variable			
Indonesia			

	Indonesia		
	В	Beta	Sig.
(Constant)	6,766		
VAIC	-,176	-,222	,194

Source : SPSS' Output

Table 4.18 above is the result of the T-Test with the risk of financial distress as the dependent variable for banking companies in Indonesia. VAIC variable has coefficient beta value -0,222 with significance 0,194> alpha (0,05). The significance value is higher than alpha. Thus, it can be concluded that hypotheses  $H_{2a}$  is rejected.

## **ZSCORE** = 6, 766 - 0, 222 *VAIC*

<b>Table 4.19</b>			
T Test Result			
<b>Risk of Financial Distress Dependent Variable</b>			
Malaysia			

	B	Beta	Sig.
(Constant)	3,098		
VAIC	1,302	,899	,000

Source : SPSS' Output

Table 4.19 above is the result of the T-Test with the risk of financial distress as the dependent variable for banking companies in Malaysia. VAIC variable has coefficient beta value 0.899 with significance 0,000< alpha (0,05). The significance value. It means that hypotheses  $H_{2b}$  is rejected.

**ZSCORE** = 3,089 + 0,899 *VAIC* 

Table 4.20 T Test Result Risk of Financial Distress Dependent Variable Philippines									
							В	Beta	Sig.
						(Constant)	12,774		
VAIC	,010	,250	,208						

Source : SPSS' Output

The table above is the result of the T-Test with the risk of financial distress as the dependent variable for banking companies in Phillippines. The coefficient beta value of VAIC is 0,250 and significance 0,208> alpha (0,05). The significance value is higher than alpha. It means that hypotheses  $H_{2c}$  is rejected.

**ZSCORE** = 12, 774 + 0, 250 *VAIC* 

## Table 4.21 T-Test Result Risk of Financial Distress Dependent Variable Thailand

I manana		
В	Beta	Sig.
24,461		
-4,699	-,827	,000,
	B 24,461	B  Beta    24,461

Source: SPSS' Output

The result of the T-Test with the risk of financial distress as the dependent variable for banking companies in Thailand is showed by Table 4.21 above. VAIC variable has coefficient beta value - 0.827 with significance 0,000 < alpha (0,05). The significance value

is lower than alpha. It means that hypotheses  $H_{2d}$  is accepted.

ZSCORE = 24, 461 - 0, 827 VAI	С
-------------------------------	---

Hypotheses Testing Summary				
Code	Hypotheses	Result		
H1a	Intellectual Capital positively influences Firm Value in Indonesia	Accepted		
H1b	Intellectual Capital positively influences Firm Value in Malaysia	Rejected		
H1c	Intellectual Capital positively influences Firm Value in Phillippines	Rejected		
H1d	Intellectual Capital positively influences Firm Value in Thailand	Rejected		
H2a	Intellectual Capital negatively influences the Risk of Financial Distress in Indonesia	Rejected		
H2b	Intellectual Capital negatively influences the Risk of Financial Distress in Malaysia	Rejected		
H2c	Intellectual Capital negatively influences the Risk of Financial Distress in Phillippines	Rejected		
H2d	Intellectual Capital negatively influences the Risk of Financial Distress in Thailand	Accepted		

## **Table 4.22**

## **D.** Discussion (Interpretation)

This research aims to verify the effect of intellectual capital towards the firm value and risk of financial distress. From the result of hypotheses testing, it can be concluded that there is a different effect of independent variable towards dependent variables in Indonesia, Malaysia, Philippines, and Thailand.

#### 1. First Hypothesis (H1)

First hypothesis (H1) is Intellectual Capital positively influences Firm Value in Indonesia, Malaysia, Philippines, and Thailand. The results of this research show that the effect of intellectual capital toward firm value is different in Indonesia, Malaysia, Philippines, and Thailand.

Based on the test results, the relation of intellectual capital has a positive effect on firm value in Indonesia. When the Intellectual Capital is high, it can lead the high of firm value. It means the company has the ability to use the intellectual capital properly. Thus, the hypothesis  $(H_{1a})$  is accepted. This result is in line with the research conducted by Nikmah and Irsyahma (2016). They found that intellectual capital has a positive influence toward firm value in a company. Based on the result, it is also in line with the Resources-Based Theory that stated better human resource which is apart of Intellectual Capital will lead to higher company's productivity. Then, it will increase the firm value of the company. The management of Intellectual Capital plays a role in increasing the value of the company so that the company can continue to grow and increase the company's added value to compete.

Different from the result of Malaysia and Phillippines that shows intellectual capital does not significantly influence firm value. Firm Value of the company cannot directly be influenced by Intellectual Capital. It means that the company does not have the ability to use the intellectual capital properly. The results of the research in contrast with the hypothesis ( $\mathbf{H}_{1b}$ ) and ( $\mathbf{H}_{1c}$ ) stated that intellectual capital positively influences firm value in Malaysia and Phillippines. Thus, the result makes ( $\mathbf{H}_{1b}$ ) and ( $\mathbf{H}_{1c}$ ) rejected.

This result is in line with the research conducted by Khasanah (2016) that states intellectual capital owned by a company may not affect in creating fine points in stakeholder's point of view. While Iranmahd et.al (2014) found that intellectual capital does not affect firm value because the company may not be very flexible adapt to the changes in the economic condition where Intellectual Capital is in. This is also consistent with the previous research that was done by Sunarsih and Mendra (2012), Khanqah et. al. (2012), and Suhendra (2015).

For Thailand, the result shows that Intellectual has a negative effect on firm value. Investors allegedly did not respond to information about intellectual capital because investors believed that the value of the company was influenced by factors outside of intellectual capital. Meanwhile, the company management considers that it does not really consider the importance of Intellectual Capital in increasing the value of the company. The management of the company views investment more physically than intellectual capital investment because the management of the company considers intellectual capital as an investment that is abstract, management does not want to bear the risk due to the large investment in intellectual capital (Lestari, 2017). Thus, makes (**H**<sub>1d</sub>) rejected.

2. Hypothesis (H2)

Second hypothesis (H2) is Intellectual Capital positively influences the Risk of Financial Distress in Indonesia, Malaysia, Philippines. The results of this research show that the effect of intellectual capital towards risk of financial distress is different in Indonesia, Malaysia, Philippines, and Thailand.

a.) Intellectual Capital and Risk of Financial Distress in Indonesia

According to the hypothesis testing, the hypothesis  $(H_{2a})$  is rejected. It means that Intellectual Capital has no influence on the risk of financial distress of companies in Indonesia. Intellectual capital cannot directly influence the risk of financial distress of a company. The high number of Intellectual Capital does not mean that bank far from the risk of financial distress. This condition can happen because Intellectual Capital is not the only factor which affects the risk of financial distress. The other factor such as tangible asset may have an effect on the risk of financial distress of the company.

The result of this research is in line with the research that were done by Maditonos et. al. (2011) and Mehralian et. al. (2012) that presents various findings showing that financial performance is not affected by intellectual capital so that it cannot predict the condition of the company in the future. There are indications that the use of physical and financial assets still dominate in contribute to the financial performance of the company.

## b.) Intellectual Capital and Risk of Financial Distress in Malaysia

According to the hypothesis testing, the result shows that Intellectual Capital positively influences risk of financial distress banking companies in Malaysia where the higher value of intellectual capital leads to the high risk of financial distress. This indicates that the use of intangible assets in banking companies in Malaysia has not been used effectively and efficiently so as to give influence on company performance which can predict the condition of companies in the future to be at high risk of financial distress. Thus, hypothesis ( $H_{2b}$ ) is rejected. The result of this research is in line with the research conducted by Andriana (2014).

The result of this research is in contrast with the research that conducted by Ardalan and Askarian (2014) that found the increase of intellectual capital lead to a lower risk of financial distress.

## c.) Intellectual Capital and Risk of Financial Distress in Phillippines

According to the hypothesis testing, the hypothesis  $(H_{2c})$  is rejected. It means that Intellectual Capital has no influence on the risk of financial distress of companies in Phillippines. Intellectual capital cannot directly influence the risk of financial distress of a company. The high number of Intellectual Capital does not mean that bank far from the risk of financial distress. This condition can happen because Intellectual Capital is not the only factor which affects the risk of financial distress. The other factor such as tangible asset may have an effect on the risk of financial distress of the company.

The result of this research is in line with the research that were done by Maditonos et. al. (2011) and Mehralian et. al. (2012) that presents various findings showing that financial performance is not affected by intellectual capital so that it cannot predict the condition of the company in the future. There are indications that the use of physical and financial assets still dominate in contribute to the financial performance of the company.

## d.) Intellectual Capital and Risk of Financial Distress in Thailand

According to the hypothesis testing, the result shows that Intellectual Capital negatively influences the risk of financial distress banking companies in Thailand. The higher the value of the Intellectual Capital variable, the bank is further away from the risk of financial distress. Therefore, it can be concluded, the higher the value of Intellectual Capital, the less likely the bank will experience bankruptcy. Intellectual Capital owned by the company is able to keep the company away from the condition of Financial Distress. It is the evidence if the development of a company is not only influenced by tangible capital owned by the company but also greatly influenced by the intangible capacity such as system, management, management, enthusiasm, and other intellectual capital. Thus, hypothesis ( $\mathbf{H}_{2d}$ ) is accepted.

The result is in line with the research conducted with Ardalan and Askarian (2014), Pour et al (2014), Ulum (2008), and Belkaoli (2003). They found that the higher the Intellectual Capital value, the less likely the bank will experience bankruptcy.