CHAPTER 4

RESULTS AND DISCUSSION

1.1 Overview of Research Objects

The object of this research is to the banking company in the Osiris database which Osiris is a comprehensive database containing financial information, rating, earnings estimates, stock data, ownership data and news about global open companies, banks and insurance companies around the world with coverage around 190 countries and over 46,000 companies in the world. Financial information, both standardized and still based on national and regional standards, is provided with different templates for each type of company under the configuration of accounts present in each type of company. In addition, Osiris allows users to search data based on any combination of criteria, including: geographic location, ownership, stock data, industry code or activity description, a number of employees, report items, ratios, ratings, and so on. And companies listed on Indonesia and Malaysia Stock Exchange period 2012-2016.

Data got from financial statements sourced from www.idx.com (INDONESIA) and www.bursamalaysia.com (MALAYSIA). The population used is a banking sector companies in Osiris database with 18 banking companies for Indonesia and 10 banking companies for Malaysia. Sampling technique in this research is using purposive sampling method that is sampling with a certain criterion. The sample used is to meet the criteria that have been determined that publish the results of its financial statements. Sampling can be seen from the following table:

Table 4.1 Result of purposive sampling

Explanation	The Number of data period 2012-2016	Total
Indonesian and Malaysian Banking Companies	28	28
Companies that do not publish their financial statements completely	18	18
Total company sampling	10	10

Viewed from the above table it is concluded that the number of companies listed in the Osiris database and listed on the Indonesia Stock Exchange and Bursa Malaysia 28 companies but because the criteria require to have completeness in the financial statements, than companies that have complete data only amounted to 10 companies, other criteria established in this study is a company that distributes the value of the company, but in this study there are many companies that do not issue dividends, the reason the company does not issue dividends (although recorded profits) means all profits into employed earnings and increase the company's liquid assets. With additional kept earnings, the company has a stronger source of its own funds for expansion needs. Stock prices on the exchange will not be affected by the dividend effect. For companies that do not pay dividends there will be no price drop due to dividend payout, so the company that issued the dividend value only amounted to 10 companies.

In this study, the data will be used for the if at SPSS that is 50 data taken from 10 companies multiplied by 5 years of research, but in because of the data outlier then the data is trimmed into 40 pieces of data, data outlier is data that appears to have unique characteristics that look very much different from other observation observations and appear in an extreme form both in a single variable or combination variable, Outlier data comes from the population taken as a sample, but the distribution of variables in the population has extreme values.

1.2 Descriptive Statistics

Descriptive statistics are descriptive of data seen from mean, standard deviation, variance, maximum, minimum, sum, range, kurtosis and swekness (Ghozali, 2011). The results of descriptive statistical test of this study as follows:

Table 4.2 Result of Descriptive Statistics

	Leverage	ROE	DPR	PER	PBV
Mean	0.8575	0.1715	0.3518	10.5643	0.1543
Maximum	0.92	0.29	0.79	28.48	0.32
Minimum	0.73	0.07	0.08	0.12	0.14
St. Dev.	0.04476	0.05700	0.19737	6.44954	0.07379
N	40	40	40	40	40

Based on Table 4.1 the results of descriptive analysis of the amount of data (N) as much as 40 data. In Leverage variables pretended with Leverage has a mean value of 0.08575, the maximum value of 0.92, the minimum value of 0.73 whereas the standard deviation value of 0.04476.variable profitability proxy with Return On Equity (ROE) has a mean value of 0.1715, a maximum value of 0.29, a minimum value of 0.07 and a standard deviation value of 0.05700. The Dividend Policy variables are proxy with a Dividend Payout Ratio (DPR) which has a mean value of 0.03518, a maximum value of 0.79, a minimum value of 0.08 and a standard deviation value of 0.19737. Then on the investment opportunity variables proxies with Price Earning Ratio (PER) has a mean value of 10.5648, a maximum value of 28.48, a minimum value of 0.12 and a standard deviation value of 6.44954. and for the dependent or dependent variable: The value of the company proxy by the Price Book Value has a mean value of 0.1543, the maximum value of 0.32, the minimum value of 0.14, and at the standard deviation of 0.07379.

4.3 Research Result

4.3.1 Classic Assumption Test

This study aims to analyze the effect of Leverage, Profitability, Dividend Policy and Investment Opportunity to Corporate Value in banking companies listed on Indonesia Stock Exchange and Malaysia period 2012-2016. Before the regression analysis will be tested classical assumptions. Testing the classical assumption is the main requirement in the regression equation, then tested some following classical assumptions:

4.3.1.1 Normality test

Normality test aims to test whether the regression model of intruder or residual variable has a normal distribution. This normality test uses the result of one sample k-z by using unstandardized on the residual column, in which the output of the normality test is:

Table 4.3 Normality test Result

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		40
Normal Parameters[a,b]	Mean	0E-7
	Std. Deviation	.05052176
Most Extreme Differences	Absolute	.076
	Positive	.076
	Negative	-.066
Kolmogorov-Smirnov Z		.478

Asymp. Sig. (2-tailed)	.977

a. Test distribution is Normal.
b. Calculated from data.

The results of normality test by using Kolmogorov-smirnov z which is described in the above table shows that dependent Kolmogorov-Smirnov Z is equal to 0.628 with significant levels seen from Asymp.Sig. (2-tailed) of 0.977. from the results described can be seen that the number (sig) for the dependent variable on the Kolmogorov-smirnov z test got 0.977> 0.005 which means that the sample is normally distributed.

4.3.1.2 Multicollinearity test

Multicollinearity test aims to test whether there is a correlation between independent variables (independent). A good regression model should not be correlated between independent variables. If the independent variables are correlated, then these variables are not orthogonal in independent variables whose correlation value sesame variable independent equal to zero (Ghozali, 2011), how to detect multicollinearity problem can be seen through tolerance value or variance inflation factor value. Common values used to indicate multicollinearity are tolerance values> 0.10 or equal to VIF value <10 (Ghozali, 2011). As for multicollinearity test results are:

Table 4.4 Multicollinearity Test Result

Variable	Collinearity statistics		Information
	Tolrance	VIF	
Leverage	0.713	1.402	There is no multicollinearity
ROA	0.796	1.256	There is no multicollinearity
DPR	0.667	1.500	There is no multicollinearity
PER	0.657	1.522	There is no multicollinearity

a. Dependent variable : company value

Based on the results of the test on the above table it is known the leverage variable (X1) has a tolerance value of 0.713 and the VIF value of 1.402, for the variable Return On Equity (X2) has a tolerance value of 0.796 and VIF value of 1.256, Dividend Payout Ratio (X3) has a tolerance value of 0.667 and a VIF value of 1,500, and the variable Price Earning Ratio (X4) has a tolerance value of 0.657 and a VIF value of 1.522.

From the above results got the conclusion that the tolerance value on the variable Leverage, ROA, DPR and Per> 0.10 and VIF value on Leverage, ROA, DPR, and PER <10 variables, it shows that there is no multicollinearity problem in the regression model.

4.3.1.3 Autocorrelation Test

Autocorrelation test aims to test whether in the linear regression model there is a correlation between the intruder errors in period T-1 (previous). If there is a correlation, it is called an

autocorrelation problem (Ghozali, 2011). In this autocorrelation test using Watson Durbin test

Hypothesis:

Ho : there is no autocorrelation

Ha : autocorrelation occurs

The output of the autocorrelation test is as follows:

Table 4.5 Autocorrelation Test Result

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.729[a]	.531	.478	.05333	1.812

a. Predictors: (Constant), LEVERAGE, PROFITABILITY, DIVIDEND POLICY AND INVESTMENT OPPORTUNITY.

b. Dependent Variable: COMPANY VALUE

Based on the table 4.5 Durbin Watson value of 1.812 with T value using significance 5% (0.05). The number of samples of 40 data and the number of independent variables as much as 4 (k = 4) so k-1 = 3. Then the Durbin Watson table will get the following value (seen from Durbin Watson table).

Information : N = 40
K = 3
Dw/d = 1.812
dL = 1.338
Du = 1.659

From Durbin Watson table obtained value dl = 1.3384 and du = 1.6589, it shows Durbin Watson value as follows:

Table 4.6 Durbin Watson Result

Explanation	**Results of Number**	**Appropriate /Inappropriate**
$d < dl$	$1.812 > 1.338$	Inappropriate
$d > dl$	$1.812 > 1.338$	Appropriate
$dl \leq d \leq du$	$1.338 \leq 1.812 \geq 1.659$	Inappropriate
$d > 4 - dl$	$1.812 < 2.662$	Inappropriate
$d < 4 - du$	$1.812 < 2.341$	Appropriate
$4 - du \leq d \leq 4 - dl$	$2.341 \geq 1.812 \leq 2.662$	Inappropriate
$du < d < 4 - du$	$1.659 < 1.812 < 2.341$	Appropriate
$4 - du \leq d \leq 4 - dl$	$2.341 \geq 1.812 \leq 2.663$	Inappropriate

From the results of the above table obtained the conclusion of appropriate values and avoid the autocorrelation test that is:

$d > dl$ = $1.812 > 1.338$

$d < 4 - du$ = $1.812 < 2.341$

$du < d < 4 - du$ = $1.659 < 1.812 < 2.341$

This means that there is no positive autocorrelation, while other results are ignored because positive values support avoidance of autocorrelation.

4.3.1.4 Heteroscedasticity

The heteroscedasticity test was performed to test whether in the regression model there was uncertainty of the variance of the residual of an observation to another observation. A good regression model is homoscedasticity or not heteroscedasticity. The test results using Rank Order correlation from Spearman which results as follows:

Table 4.7 Heteroscedasticity Test results

Explanation	Significance	Alpha 5%	Conditions	Conclusion
X1	0.658	0.05	Sig > Alp	Accept Ho
X2	0.857	0.05	Sig > Alp	Accept Ho
X3	0.409	0.05	Sig > Alp	Accept Ho
X4	0.323	0.05	Sig > Alp	Accept Ho

Based on the summary of the calculation results in Table 4.6 above shows that the probability value of the relationship between observation and absolute residual for each variable is far above the specified significance level, that is 0.05 (5%). Therefore, Ho stated that there is no relationship between free variable and absolute residual is accepted. The results be concluded that the data got there is no heteroscedasticity and research can be continued.

4.4 Multiple Linear Regression Analysis

Multiple linear regression analysis is used to examine the factors that influence between the independent variables to the dependent variable where the independent variables in this study over one variable. The model of a multiple regression equation is:

Table 4.8 Multiple Linear Regression Test Result

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-.343	.198		-1.730	.093
LEVERAGE	.264	.226	.160	1.169	.250
PROFITABILITY	.767	.168	.593	4.570	.000
DIVIDEND POLICY	.184	.053	.493	3.476	.001
INVESTMENT OPPORTUNITY	.007	.002	.616	4.314	.000

Dependent Variable: Company Value

Based on table 4.8 above can be formulated multiple linear regression equation as follows:

$$\mathbf{PBV_{it} = -0.343 + 0.246Lev_{it-1} + 0.767ROE_{it-1} + 0.184DPR_{it-1} + 0.007PER_{it-1} + ci}$$

Information:

PBVit = Price Book Value
$\beta_1 LEV_{it-1}$ = Leverage
$\beta_2 ROE_{it-1}$ =Profitability Proxy ROE
$\beta_3 DPR_{it-1}$ = Dividend Policy Proxy DPR
$\beta_4 PER_{it-1}$ = Investment Opportunity Proxy PER
Ci = Error term
β_0 = Constanta

Interpretation of the above regression is:

a. Constanta (β_0)

This means that if all independent variables have a zero value (0) then the value of the dependent variable (PBV) is -0.343.

b. Leverage (LEV) against the value of the company proxy PBV

The value of regression coefficient of variable leverage to company value proxies Price Book Value (PBV) equal to 0246 this value show that every leverage increase of one unit predicted will increase company value equal to 0246 with the assumption that other free variable from a model of regression is fixed.

c. Profitability (ROE) against the value of company proxy (PBV)

The value of regression coefficient variable profitability to the value of the company in the proxies Price Book Value (PBV) of 0.767 this value shows that each increase leverage of one unit is predicted to increase the company's value of 0.767 with the assumption that other independent variables of the regression model is fixed.

d. Dividend Policy (DPR) against the value of the company proxy PBV

The value of regression coefficient variable of dividend policy toward company value which is proxy Price Book Value (PBV) equal to 0184 this value show that every leverage increase of one unit predicted will increase company value equal to 0184 with the assumption that other free variable from a model of regression is fixed.

e. Investment Opportunity (PER) against the value of the company proxy PBV

The value of regression coefficient of variable leverage to company value proxies Price Book Value (PBV) of 0.007 this value shows that every leverage increase of one unit predicted will increase company value equal to 0.007 with assumption that other free variable from regression model is fixed.

4.5 Individual Parameter Significance Test (T Test)

The t test is used to find out whether the independent variables are partially significant to the dependent variable. Significance used is 0.05. If the significant value is less than trust, then we accept the alternative hypothesis which states that an independent variable affects the dependent variable.

T test analysis is also seen from the table "Coefficient" as follows:

Table 4.9 T test result

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	-.343	.198		-1.730	.093
LEVERAGE	.264	.226	.160	1.169	.250
PROFITABILITY	.767	.168	.593	4.570	.000
DIVIDEND POLICY	.184	.053	.493	3.476	.001
INVESTMENT OPPORTUNITY	.007	.002	.616	4.314	.000

a. Dependent Variable: COMPANY VALUE

Based on the table above obtained results as follows:

a. Leverage on the company value

Seen sig value on leverage is 0.250. The sig value is greater than the probability value 0.05, or the value of 0.250> 0.05, then H1 is rejected and Ho is accepted. The leverage variable has T count that is 1,169 with T table = 2,024. So

T count <T table. So it can be concluded leverage has no significant effect on company value.

b. Profitability on the company value

Seen in the Coefficients column there is a value of sig 0.000. The sig value is smaller than the probability value 0.05, or the value 0.000 <0.05, then H1 is accepted and Ho is rejected. Profitability variable has T count that is 4,570 with T table = 2,024. So T count> T table can be concluded that profitability variable has contribution to company value. A positive t value shows that the profitability variable has a direct relationship with firm value. So it can be concluded profitability has a significant influence on Beta.

c. Dividend policy on the company value

Seen in the Coefficients column there is a value of sig 0.001. The sig value is smaller than probability value 0.05, or value 0.001 <0.05, then H1 is accepted and Ho is rejected. The dividend Policy variable has T count of 3,476 with T table = 2,024. So T count> table can be concluded that Dividend Policy variable has contribution to company value. A positive t value shows that the Dividend Policy variable has a direct relationship with firm value. So it can be concluded Dividend Policy has a significant influence on Beta.

d. Investment opportunity on the company value

Seen in the Coefficients column there is a value of sig 0.000. The sig value is smaller than the probability value 0.05, or the value 0.000 <0.05, then H1 is accepted and Ho is rejected. The Investment Opportunity variable has a T count of 4.314 with T table = 2.024. So T count> T table can be concluded that Investment Opportunity variable has contribution to company value. A positive t value shows that the Investment Opportunity variable has a direct relationship with firm value. So it can be concluded profitability has a significant influence on Beta.

So that can be taken from the testing its hypothesis as follows:

Table 4.10 Hypothesis Test Result

Hypothesis	Question	Value	Explanation
H_1	Variable leverage has no significant effect on company value	1.169	H_1 : Rejected H_0 : Accepted
H_2	Variable profitability have significant effect to company value	4.570	H_1 : Accepted H_0 : Rejected
H_3	Variable dividend policy has significant effect to company value	3.476	H_1 : Accepted H_0 : Rejected
H_4	Variable investment opportunity significantly influence the value of the company	4.314	H_1 : Accepted H_0 : Rejected

4.6 Model Feasibility Test (F test)

The F test is used to see if the model in the study is workable or not used in analyzing the research undertaken. This test can be seen on F-test. The value in this study using a 0.05 significance level, if the significance value of F <0.05 then

meet the provisions. Whereas if the value of F> 0.05 then the regression model does not meet the requirements.

Results table f in the study as follows:

Table 4.11 F table Result

ANOVA[a]

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	.113	4	.028	9.918	.000[b]
Residual	.100	35	.003		
Total	.212	39			

Dependent Variable: Company Value

Predictors: (Constant), Leverage, Profitability, Dividend Policy and Investment Opportunity

Based on the table 4.11 got significant coefficient results show that the significant value of 0.000 with the value of f arithmetic of 9.918 and f table of 2.64. Means that F table> F count (9.918> 2.64) or Sig <0.05 (0.000 <0.05) and means that the regression model is appropriate for this study.

4.7 coefficient of determination (Adjusted R^2)

Coefficient of determination is a tool to measure the percentage of the influence of independent variables on related variables. The magnitude of the coefficient of determination ranges from 0 to 1 approaching zero the magnitude of the coefficient of determination of a regression equation, meaning that the smaller the influence of all independent variables on the dependent variable. Greater coefficient of the determination. the greater the influence of all independent variables on the dependent variable.

The test results coefficient determination using the test goodness fit from the regression model obtained from the R square value is as follows:

Table 4.12 Goodness fit Result

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.729[a]	.531	.478	.05333

a. Predictors: (Constant), LEVERAGE, PROFITABILITY, DIVIDEND POLICY AND INVESTMENT OPPORTUNITY.

Dependent Variable: COMPANY VALUE

Based on Table 4:11 shows the value of R square for the variable leverage, profitability, dividend policy and investment opportunities got for 0.531. This means that 53.1% of the value of the company can be explained by independent variables in the model, while the remaining 46.9% can be explained by other variables outside research model.

4.8 Discussion

4.8.1 The Influence of Leverage on the company value

The first hypothesis in this research is leverage has a significant negative effect on firm value. Based on the results of t test for leverage variables got a value of significance of 0.250 is greater than fault tolerance $\alpha = 0.05$. Therefore, the significant value of the leverage variable is greater than 0.05 and the positive regression coefficient is 1,169, this means the hypothesis that "leverage has a negative effect and significant to firm value" is **rejected**.

Coefficients with positive marks with negative leverage are not significant, which means that leverage is not able to affect the value of the company, the company that is too much to do with debt, is considered

unhealthy because it can reduce profits and impact the decline in the value of a company. Excess leverage (leverage) is great will have a negative impact on the value of the company (Ogolmagai, 2013).

The results of this study are similar to the research conducted by yuyetta (2009) states that leverage does not affect the value of the company. The research conducted by Fama (1978) supported by Cortez & Stevie (2012), Akinlo & Asaolu (2012), stated that the value of debt had a significant negative effect on firm value, and Mahendra research, et al. (2012) states that leverage has a negative effect is not significant to the value of the company.

4.8.2 The influence of Profitability on the company value

The second hypothesis in this research is profitability have a positive and significant effect to company value. Based on the result of partial test (t test) for profitability variable proxies with Return On Asset (ROA) got significance value equal to 0.000 smaller than fault tolerance α = 0.05 and positive value regression coefficient equal to 4,570, this means hypothesis that "profitability have a negative and significant influence on firm value "is **accepted**.

Positive coefficients and positive significance show that high profitability will increase the value of the company. High profitability reflects the company's ability to generate profits over a certain period at the level of sales and increase profits for shareholders. It can show a good growth prospect, it will make investors respond positively to the signal and investors will catch the signal so it can trigger investors to increase demand for stocks and stock price increases and result in increased value of the company.

The results of this study are similar to the results of research conducted by Mardiyati (2012), Setiabudi and Dian (2012), Rizqia et al., (2013) which shows that profitability has a positive and significant impact on firm value.

4.8.3 The influence of dividend policy on the company value

The third hypothesis in this research is dividend policy have a positive and significant effect to firm value. Based on the result of t test statistic for dividend policy variable proxy by Dividend Payout Ratio (DPR) got a significant value equal to 0.001 less than fault tolerance α = 0.05. Therefore, the significance value is less than 0.05 and the positive regression coefficient is 3,476. This means the hypothesis that "dividend policy has a positive and significant effect on firm value" is **accepted**.

Coefficients with positive signals with a positive and significant significance mean that firms using dividend policy can affect the stock price of a company. Companies that share dividends and increase will provide a positive sentiment to investors, so it can affect the rise of a company's value.

The results of this study are similar to the results of research conducted by Dasilas et al. (2009), Son et al. (2010), Afzal and Abdul (2012), and Mardiyati (2012) showing that dividend policy positively influences company value.

4.8.4 The influence of investment opportunity on the company value

Fourth hypothesis in this research is an investment opportunity have a positive and significant effect to company value. Based on the result of t test for investment opportunity variables proxies with Price Earning Ratio (PER) got a value of significance equal to 0.000 smaller than fault tolerance value $\alpha = 0.05$. Therefore, the significance value of the investment opportunity is less than 0.05 and the regression coefficient is 4,314, this means the hypothesis that "investment opportunity has a positive and significant effect on firm value" is **accepted**.

Positive coefficients and positive significance show that high investment opportunities will increase the value of the company. Companies with high investment opportunities are companies with bright prospects and will positively influence the company's stock price (Rizqia et al., 2013). Investment opportunities show the ability of firms to profit from growth prospects. The prospect of a company is an expectation desired by management and investors and creditors. Thus investment opportunities have a positive influence on firm value.

The results of this study are similar to the results of research conducted by Andriyani (2011), Rakhimsyah and Barbara (2011), and Rizqia et al. (2013) found evidence that investment opportunities have a significant positive effect on firm value.