CHAPTER IV

DATA ANALYSIS AND DISCUSSION

4.1 Sample Selection

Data that is used in this research is taken from manufacturing firms listed in Indonesia Stock Exchange (BEI). The observation period starts from 2012 to 2015 (4 years). Sample determination was done by using the method of purposive sampling. Based on the criteria in the sample selection, the sample of firms used in this research is 216 firms for four years. Table 4.1 illustrates the sample selection procedures:

Table 4.1
Sample Selection

Description	2012	2013	2014	2015	Total
Manufacturing firms listed in BEI	134	138	142	143	557
1. Manufacturing firms that did not pay cash dividends	(75)	(69)	(97)	(85)	(326)
2. Have incomplete financial report that used to measure variables	(4)	(4)	(5)	(2)	(15)
TOTAL	55	65	40	56	216

4.2 Data Analysis

4.2.1 Descriptive Statistics

Descriptive statistic test is used to provide an overview of a data viewed from the number of sample, maximum and minimum value, mean value, and standar deviation of each variable. The result of descriptive statistics is presented in Table 4.2.

Table 4.2

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
DPR	212	-.605	1.459	.36308	.284376
FCF	212	-.185	.543	.09875	.118715
SIZE	212	8.046	14.390	12.11429	1.304799
AGE	212	4.000	114.000	42.51415	22.847004
Valid N	212				

The total sample used in this research is 212 manufacturing firms after trimming process is done. Based on the table, the mean of DPR has a value range from -0.605 to 1.459. The mean value is 0.36308 with standard deviation of 0.284376. The FCF has a value of -0.185 to 0.543 with mean value 0.09875 and standard deviation 0.118715.

SIZE as control variables has a value of 8.046 to 14.390 with mean value 12.11429 and standard deviation 1.304799. AGE as control variables

has a value of 4.000 to 114.000 with mean value 42.51415 and standard deviation 22.847004.

4.2.2 Normality Test

Normality test is aimed to determine whether data is normally distributed or not in the regression model. A normal data indicates a good regression model. Normality test is done by using Kolmogorov-Smirnov. Normality test in this research was done two times because the first test data has not been distributed normally. The results can be seen in Table 4.3 and Table 4.4.

Table 4.3.
Normality Test Before Trimming
One-Sample Kolmogorov-Smirnov Test

	Unstandardized Residual
Asymp. Sig. (2-tailed)	.010

a. Test distribution is Normal

b. Calculated from data

The first result shows that Asymp. Sig (2-tailed) is lower than 0.05. This is an indication that the data is not normally distributed. It might happen because the data has a very extreme value from other data. Therefore, a trimming method is used to make the data normally distributed. There were 4 data trimmed in this research.

Table 4.4
Normality Test After Trimming
One-Sample Kolmogorov-Smirnov Test

	Unstandardized Residual
Asymp. Sig. (2-tailed)	.078

a. Test distribution is Normal

b. Calculated from data

The second normality test is done and the result shows that the Asymp. Sig (2-tailed) 0.078, which is above 0.05, indicates the data has ben normally distributed.

4.2.3 Multicollinearity Test

Multicollinearity test is used to determine the correlation among independent variables in a regreesion model. A good regression should not have any correlation between the independent variables. The multicollinearity is measured through the value of Tolerance and Variance Influence Factor (VIF). If the tolerance value is less than 0.10 and VIF value is greater than 10.00, multicollinearity occur and the regression model is not feasible to use. The result of multicollinearity test can be seen in Table 4.5.

Table 4.5

Multicollinearity Test

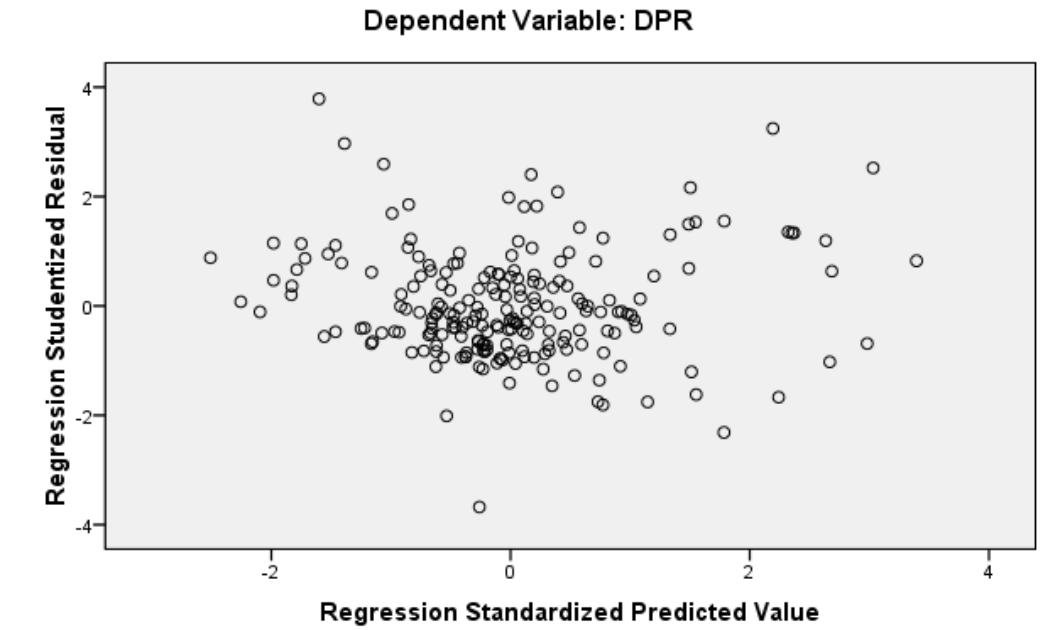
Model	Collinearity Statistics	
	Tolerance	VIF
FCF	.899	1.112
SIZE	.989	1.011
AGE	.890	1.123

a. Dependent Variable: DPR

The result shows that all variables has the values of tolerance more than 0.10 and VIF less than 10.00. Thus, it can be concluded that the data in this research is free from multicollinearity.

4.2.4 Heteroscedasticity Test

Heteroscedasticity test aim to test whether variance and residual from one observation to other is identical. If the redult is identical, homoscedasticity is present. If the result is not identical, heteroscedasticity is present. If the result is not identical, it indicates a heteroscedasticity. A good regression model is the one in which possess homoscedasticity or no heteroscedasticity. The heteroscedasticity can be done by using scatterplot diagram.



The result shows that the scatterplot spread above and below 0 in the Y axis and do not have any certain pattern. It can be concluded that there is no heteroscedasticity or in other words it is homoscedasticity.

4.2.5 Autocorrelation Test

The purpose of this test is to examine whether the residual of one observation and another has correlations or not. The autocorrelation test is done by using Durbin-Watson through SPSS program. The result of the test can be seen in Table 4.6.

Table 4.6

Autocorrelation Test

Model	Durbin-Watson
1	2.145

a. Predictors: (Constant), AGE, SIZE, FCF

b. Dependent Variable: DPR

The autocorrelation test is done by looking at the Durbin-Watson table and use n=210 and total independent variable k=3, the dU value from Durbin-Watson table is 1.79326. According to the test result, the Durbin-Watson score is 2.145, or between the dU values of 1.79 and 4-dU of 2.20674. Thus, there are no symptoms of autocorrelation is this regression model.

4.3 Hypothesis Testing

Hypothesis testing is used to examine a regression analysis test. Regression test will be used to examine the impact of independent variable on dependent variable. The hypothesis testing was performed by using SPSS tool and the result is as presented in Table 4.7.

Table 4.7
Hypothesis Testing

Model	Unstandardize Coefficient	Sig.
	B	
(Constant)	-.271	.102
FCF	.837	.000
SIZE	.041	.003
AGE	.001	.100

Sig. F	.000
Adjusted R. Square	.190

Table 4.7 shows that the significant value of FCF is 0.000 < 0.05 which means that FCF has a significant impact towards dividend payout ratio. Firms with free cash flow will have an effect on firm's dividend payout ratio. The significant value of SIZE is 0.003 < 0.05 which means that SIZE of the firm has an impact towards dividend payout ratio. The significant value of AGE is 0.100 > 0.05 which means that SIZE does not has an impact towards dividend payout ratio.

The result shows the value of Adjusted R. Square is 0.190 or 19%. It means that 19% dividend payout ratio level can be explained by variations of independent variables in this research. The remaining 81% is explained by other variables outside the independent variable.

4.4 Discussion

The result from hypothesis testing shows the significant value of free cash flow that is lower that 0.05 and β_1 is positive (0.837). Thus, free cash flow has an impact towards dividend payout ratio and the impact is positive. High free cash flow produce more cash dividend to be distributed for investors. Conversely, low free cash flow will produce lower dividend. The H_1 that stated that there is positive impact between free cash flow and dividend payout ratio is accepted.

Firms that are larger also shows to have positive impact on dividend payout ratio. This is because larger firms generate more sales and thus creating more profit and the cash that is needed to distribute dividends. However, the age of a firm does not has an impact on dividend payout ratio. It might be because firms does not consider the age of their firm when determined the dividend policy and thus make the DPR tend to not consistently increase following the maturity of the firm.

This research indicates that free cash flow is a factor that can predict dividend payout ratio. When a firm generate free cash flow, investors may expect the cash to be distributed in the form of dividends.

This research support the finding in previous research conducted by Hejavi and Moshtaghin (2014), Noorozani and Kheradmand (2014), Labhane and Das (2015), and Suci (2016) that there is a positive impact between free cash flow and dividend payout ratio.