Factors Affecting Dividend Payout Ratio Period 2011-2015

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Abstract: *This study analyzes the factors that affect dividend payout ratio policy on companies which are registered in agricultural sector for the period of 2011-2015. There are six companies that meet the criteria namely PT.Astra Agro Lestari (AALI), PT.London Sumatera Indonesia Plantation(LSIP), PT.New Tunas Lampung (TBLA), PT.Sampoerna Agro (SGRO), PT.Sinar Mas Agro Resources and Technology (SMART), and PT.Bisi International (BISI). The method of analysisused to process the data is static panel data.. The result of panel data regression with selected method pooled least square shows that both variables ROEand Exchange Rate have positive and significant effect on the dividend payout ratio.*

Keywords: DER, DPR, Exchange Rate, Inflation, Panel Data, ROE

1. Introduction

Investors are individuals and business entities whoactively invest and trade in the capital market. Investment in stocks made by individuals and business entities is an alternative to increase prosperity which returns comes fromincome (dividend)and or from capital gain. Investors generally want a stable dividend payment and expect an increase in dividend. Dividendis the representation of corporate earnings granted to shareholders in cash, assets or other forms. The dividend policy is the decision to divide the profits or hold them for reinvestment within the company. There are three theories of dividend policy from investor preferences which are dividend irrelevance theory, the bird in the Hand Theory, and tax preference theory (Brigham, 2001).

Dividend irrelevance theory, proposed by Modigliani & Miller (1961), states that the company's dividend policy has no effect either on the company's value or its cost of capital. MM concluded that the current value of the company is not determined by the size of the Dividend Payout Ratio but the net profit before tax (EBIT) and business risk.

The Bird in the Hand Theoryproposed by Gordon and Lintner (1956) argued that investors feel more secure to earn income in the form of dividend payments instead ofwaiting for capital gains. Gordon and Lintner assume that the current profits derived from dividend payout is better than the future gain from higher-risk capital gains

Tax preference theoryargues that the investor prefer the company to hold profit after tax and to useit for financing the investment instead of dividend in cash. Therefore companies would be better to determine a low dividend payout ratio or distribute dividends. Because dividends tend to be taxed higher than capital gains, investors prefer capital gains because they can delay high tax payments.

Information Content, or Signaling, Hypothesis states that investors consider dividend changes as a harbinger for management's estimation of earnings. Modigliani and Miller's opinion in this theory is that an increase in dividends above the normal rise is usually a signal to investors that the firm's management predicts a good earnings gain in the future, while a decrease in dividend is a sign of low or poor earnings forecasts.

Clientele Effect is a tendency for companies to attract different group of investor (different clienteles) who preferspecial dividend policies. Shareholders who prefer current income rather than future capital gains require that companies disburse large number of profit. In contrast, shareholders who are in high tax bracket usually prefer receive their returns in form of capital gains and therefore they prefer low dividend payout ratio.

Some researchers have conducted research on the factors that affect dividend policy in Indonesia. However, studiesof dividend policy which focused specifically on agriculture sector are still limited. Therefore, conducting research on it becomes very important. Factors which are considered to have influence on dividend policy of agricultural firms in this research are Debt to Equity Ratio (DER), Return on Equity (ROE), Inflation and Exchange Rate.

According to Riyanto (2001), Debt to Equity ratio (DER) is type of Solvency Ratio. This ratio measuresthe proportion of debt and equity in the firm's capital structure. From the investor's point of view, this ratio would be better if the amount of equity is greater than the amount of debt or at least the same. The formula of DER is as follow :

$$Debt\ to\ Equity\ Ratio = \frac{Debt}{Equity}$$

According to Sartono (2001), the higher DER ratio the more risky the company because the risk of insolvency is higher. If it is related to dividend payout, there is a negative relationbetween DER and dividend payout ratio (DPR),

which implies the higher DER, the smaller the dividend that will be paid and vice versa.

Return on Equity (ROE) is one of the profitability ratios that describe a company's ability to generate profits from its shareholder's investment. The formula that can be used to calculate ROE is as follows

$$Return\ on\ Equity = \frac{Net\ Income\ After\ Tax}{Total\ Equity}$$

According to Sawir (2005), ROE was a ratio used by shareholders to assess the performance of the company concerned. Stated differently, ROE measures the magnitude of the company's payback rate. The higher this ratio the better the state of a company. According to Suharli (2006), ROE has a significant positive effect on DPR. It means that the higher the value of ROE the greater the dividend that can be paid and vice versa.

Inflation is a tendency of increasing price level.High inflation can reduce the level of real income received by investors from their investments. Although inflation can increase a corporate's revenue through a rise in selling prices of its produtcs/services but inflation also has an effect in increasing the company's operational costs. If the increase in production costs is higher than the increase in the selling prices,the company's profits will decrease.A relative increase in the rate of inflation is a negative signal for investors in the capital market (Tandelilin, 2010), especially for companies that have a high degree of solvency. This is because, an increase in inflation will cause a decrease in the company's profits and eventually its stock price will fall. In addition, a high rate of inflation in a particular year was also triggered by the expectation from the public that Indonesian Rupiah(IDR) will depreciate in the future and the price level will continue to rise (Ardiyanti, 2015).

According to Joesoef (2008), the exchange rate is the amount of a particular currency that can be exchanged against one unit of another currency. Exchange rate reflects the balance of demand and supply against foreign currencies, especially the US Dollar. Indonesia companies that export their products abroad will benefitif IDR is depreciating against US Dollar. The IDR's depreciation will increase the profit of the company and subsequenly will have a positive impact on cash and thus the company can increase the dividend payments to investors. This concept was supported by a research conducted by Binastuti (2012). According to Binastuti (2012), the exchange rate influenced positively on the dividend policy.

This study aims to analyze the effect of DER, ROE, Inflation and Exchange rate on dividend policy of agricultural companies which distributes their dividends continuously from 2011 to 2015. The agricultural sector is the sector with the lowest market capitalization value compared to the other sectors.

HYPOTHESIS
Based on the theories and the results of previous research, the hypothesis in this study can be formulated as follows:
H1 : Debt to Equity Ratio (DER)has a negative effect on Dividend Payout Ratio

H2:Return on Equity (ROE)has apositive effect onDividend Payout Ratio
H3:Inflationhas a negative effect on Dividend Payout Ratio
H4:Exchange rate has a positive effect on Dividend Payout Ratio

2. Method

The population of this study are 20 companies which areregistered onthe agriculture sector on the Indonesia Stock Exchange from the year 2011 until 2015. We used purposive sampling method. According to Margono (2004), the selection of a group of subjects in purposive sampling is based on certain characteristics that are deemed to have a close relation to the characteristics of the population that have been known before. In other words, the unit of the connected sample is adjusted with certain criteria applied based on research objectives. The criteria used to select a company as sample in this study are as follows:
1) A company that had published annual financial statements during the period 2011-2015.
2) A companywhich paid dividends for five consecutive years over the period of 2011-2015.

Out of 20 companies, there are 14 companies that met the first criterion. After screening further using the second criterion, there are only 6 companies namely, 1) PT.Astra Agro Lestari Tbk, 2) PT.London Sumatera Indonesia Plantation Tbk, 3) PT.Tunas Baru Lampung Tbk, 4)PT.Sampoerna Agro Tbk, 5) PT.Sinar Mas Agro Resources and Technology Tbk, 6) PT.Bisi International Tbk. that can be used as samples in this reseach.

We used Dividend Payout Ratio as dependent variable which is defined as the ratio between profit paid as dividend and total profits available for shareholders. Independent variables that are suspected to have an influence on dividend payout ratio (DPR) policy as mentioned earlier are Debt to Equity Ratio (DER), Return on Equity (ROE), Inflation and Exchange Rate.

In this research, we used secondary data for both dependent and independent variables. The data were obtained from various sources including the companys' annual report and official websites of the Central Bank of Indonesia, the Indonesian Stock Exchange and The Kustodian Sentral Efek Indonesia.

The impact of all independent variables on the dividend pay out ratio is analysed by panel data methodology. Panel data is a combination of time series and cross section data. The panel data regression model that was used in this research is formulated as follows:
$$Y = \alpha + b_1 X_{1it} + b_2 X_{2it} + b_3 X_{3\ it} + b_4 X_{4\ it} + e$$
Where :
Y   = Dividend Payout Ratio
α = Constants
X_1 = Debt to Equity Ratio (DER)
X_2 = Return on Equity (ROE)
X_3 = Inflation
X_4 = Exchange Rate
b (1,2,3,4)= The regression coefficients of each variable

t= Time
i= Company
e= Error Term

There are three approaches to regression analysis with panel data as described below (Juanda and Junaidi, 2012):

Pooled Least Square Method (PLSM)
The PLSM approach combines all data, so there is an observational N x T, where N denotes the number of cross section units and T denotes the number of series used. The equations used in PLSM are as follows:

$$Y_{it} = \alpha + \beta \, X_{it} + e_{it} \quad ; i = 1,2, ... \, N \; dan \; t = 1,2 ... ... \, T$$

Where : Y_{it} = DependentVariables
X_{it}= Independent Variables
N = Number of Observations
T = Number of time
e_{it} = *Error*for individual i and time t

Fixed Effect Method(FEM)
In FEM, the regression intercept can be distinguished between companies because each company is considered to have its own characteristics. FEM is also known as the Least Square Dummy Variable (LSDV) method, which aims to represent intercep differences by using variable dummy. The equations used in FEM are as follows :

$$Y_{it} = \sum \alpha_1 D_1 + \beta \, X_{it} + e_{it} \; ; i = 1,2, ... \, N \; dan \; t = 1,2 ... ... \, T$$

Where: Y_{it}= DependentVariables
X_{it}= Independent Variables
N = Number of Observations
T = Number of time
e_{it} = *Error*for individual i and time t
D = Dummy Variables

Random Effect Method(REM)
In REM, the slope is no longer constant but it is regarded as a random variable with an average value of the slope of the other variables. The REM method is also known as the Error Components Model (ECM) because the error in the fixed effect is a combination of the error of each error section and of the errordata combined time series and cross section. The equations used for REM are as follow:

$$Y_{it} = \alpha + \beta \, X_{it} + e_{it} \quad ; e_{it} = u_i + v_t + w_{it}$$
Wherein : u_i= error cros section component
v_t= error time series component
w_{it}= combined error component

To select the best model from the three approaches discussed above, we use three different tests as follows:

1) Chow Test
Chow Test was used to determine which one is abetter model between PLSM and FEM. The hypothesis of Chow test as follow:
H_0 : *Pooled least squares model* (PLSM)
H_1 : *Fixed effect model* (FEM)
At 5% significance level, H_0 is accepted if the p-value of the cross section F is greater than 5%, which implies that we

select PLSM model. On the contrary, if the p-value of the cross section F is smaller than 5% then H_0 is rejected or $H_1$is accepted which means that we select the FEM model. If we have selected the PLSM model, the next step is we must perform the Lagrange Multipler test.

2) Lagrange Multipliers
The Lagrange Multiplier test was used to select the right model between PLSM and REM. The hypothesis of lagrange multiplier test is constructed as follows:
H_0 : *Pooled least squares model* (PLSM)
H_1 : *Random effect model* (REM)

At 5% significance level, H_0 is accepted if p-value is greater than 5%, which means that we select the PLSM model. On the other hand, if p-value is less than 5%, H_0 is then rejected or $H_1$is accepted which means that we select REM model. If we have selected REM model, the next step is to conductthe Hausman test.

3) Hausman Test
The Hausman test is used to select the best model between FEM and REM. The hypothesis of Hausman testis defined as follows :
H_0 : *Random effect model* (REM)
H_1 : *Fixed effect model* (FEM)

At 5% significance level, H_0 is accepted if p-value of chi-squares is greater than 5%, which means the REM model is the selected model. However if p-value of chi-squares is less than 5% then H_0 is rejected or $H_1$is accepted, which means that FEM is the chosen model.

According to Nachrowi and Usman (2006), there is a middle approach that has been suggested by some econometric experts who had proved systematically that :
a) If the panel data has a greater number oftime series (T) than the number of individuals (N), then it is recommended to use FEM.
b) If the panel data has a smaller number of time series (T) than the number of individuals (N), then it is recommended to use REM.

Testing classical assumptions
The aim of the classical assumption testsis to determine if the data used in the research meet the criteria of Best Liniear Unbiased Estimator (BLUE)in which the data have characteristics of normally distributed, nomulticolinearity, no autocorrelation, and no symptoms of heteroscedasticity (Ghozali, 2011).

1) Normality test
According to Ghozali (2011), the normality test is performed to check whether in the regression model, the residual valuesfollow a normal distribution. A good regression model has normal or near-normal data distribution. This normality test can be done either by using graphical analysis or statistical analysis.
a) Graph analysis, that is by looking at the Histrogam graph and the Normal P-Plot chart that compares the cumulative distribution of the normal distribution, the basic decision-making graph analysis is as follow:

- If the residual data spreads around the diagonal line and follows the direction of the diagonal line or the histrogam graph shows the normal distribution pattern, then the regression model satisfies the assumption of normality.
- If the residual data spreads far from the diagonal and the slash or does not follow the direction of the diagonal line or histrogam graph does not show the normal distribution pattern, then the regression model does not meet the assumption of normality.

b) Statistical Analysis, that is by looking at statistical test Non-Parametric Kolmogorov-Smirnov (K-S). If the result or value of Kolmogorov-Smirnov (K-S) and Asymp.Sig (2-tailed) value or probability above 0.05 (probability level), then the data has met the assumption of normality.

2) Multicolinearity Test
Multicollinearity test was conducted to test whether there is exact linear relationship among the independent variables. In a good regression model, there should be no correlation between independent variables. According to Ghozali (2011), the existence of multicolinearity can be detected by using the Tolerance Value and Value of Variance Inflation Factor (VIF).

a) Tolerance values. We commonly use cutoffvalues to determine the presence of multicollinearity whereby if the tolerance values <0.10 then there is an indication of multicolinearity.
b) VIF value with the following criteria:
   - If VIF value> 10 then we suspect that there is a multicollinearity problem
   - If VIF value <10 then there is no multicollinearity

3) Heteroscedasticity Test
According to Gujarati (2011), the aim of heteroscedasticity test is to assessif the error term in the regression model has homoscedasticity (equal variance) across observations. The residuals value of a good regression model has constant variance or in other words there is no heteroscedasticity. We can use White's test to detect the presence of Heteroscedasticityby comparing the value of the White's test or LM test (number of observations * R^2)with the critical value. If the LM-stat is greater than the critical value ($\chi^2_{6-1,\alpha}$), we conclude that there is significant evidence of heteroscedasticity, and vice versa. Alternatively, compute the p-value and reject the null if the p-value is less than the level of significance α (usually α = 0.05).

4) Autocorrelation Test
According to Ghozali (2011), the autocorrelation test aims to examine whether in the linear regression model exist a correlation between error term in period $_t$and error term in period $_{t-1}$ (previous). If correlationamong errors occurs, it is called the autocorrelation problem. We use Durbin-Watson test (DW test) to check the presence of serial correlation of error terms with the hypothesis to be tested as follows:

H_0 : there is no autocorrelation (r = 0)
H_a : there is autocorrelation (r ≠ 0)

Decision-making whether or not there is autocorrelation can be seen in Table 1.

Table 1: Decision-making whether or not there is Autocorrelation

Hypothesis Zero	Decision	If
There is no positive autocorrelation	Reject	0 < d < dl
There is no positive autocorrelation	No Decision	dl ≤ d ≤ du
There is no negative correlation	Reject	4 – dl < d < 4
There is no negative correlation	No Decision	4 – du ≤ d ≤ 4 – dl
There is no positive or negative autocorrelation	Not reject	du < d < 4 – du

Source : Ghozali (2011)

Annotation:
d = Durbin Watson Count
dl = Durbin Watson – Lower
du = Durbin Watson – Upper

This d_{count}then compared with d_{tabel} value at 5% significant level, the sample number 31 (N = 31) and the number of independent variables is 5 (k = 5). If d_{count}value lies between the interval the du and the 4 - du then there is no autocorrelation, otherwise if the value $d_{count}$are outside the interval of du and 4-du values then there is an autocorrelation.

Determination Coefficient Test (R^2)
The regression R^2measured the fraction of the sample variance of dependent variable explained (or predicted) by independent variables. The coefficient of determination (R^2) ranges between 0 and 1.A small R^2 value indicates the ability of independent variables to explain the variation of independent variables is very limited (Ghozali, 2011). A value close to one implies thatthe regressor is good at predicting the dependent variable.

Hypothesis testing
Hypothesis testing in this study was conducted on six independent variables to test whether have simultaneous or partial effect on the DPR

A.Test Effect Simultaneously (Test statistics F)
F-test is done to determine whether there is significant influence simultaneously between independent variables with dependent variable. The steps taken to perform the F-Test are:

1) Determine the null hypothesis and alternative hypothesis
   a) H_0 : b_1, b_2, b_3, b_4, b_5, b_6 = 0 ; DER simultaneously, cash ratio, size, ROA, NPM, tax rate have no significant influence on DPR
   b) H_1 : b_1, b_2, b_3, b_4, b_5, b_6≠ 0 ; DER simultaneously, cash ratio, size, ROA, NPM, tax rate have a significant influence on DPR
2) Determining the value Ftabelin df_1= k and df_2 = n-k-1
3) The acceptance criteria are as follows :
   a) If F_{count}> F_{tabel}mean H_0rejected
This means the independent variables are
simultaneous / simultaneous effect on the dependent variable.
   b) If F_{count}≤ F_{tabel}mean H_0accepted
This means that the independent variables simultaneously / simultaneously have no effect on the dependent variable.

B. Partial Effect Test (Test statistics t)

The statistical test t shows how far the influence of one independent variable individually in explaining variably dependent variation (Ghozali, 2011). The steps taken to perform the T-Test are:

1) Determine the null hypothesis and alternative hypothesis
   a) H_0 : b_1, b_2, b_3, b_4, b_5, b_6 = 0 ; partially DER, cash ratio, size, ROA, NPM, tax rate has no influence on DPR
   b) H_2 : b_1, b_2, b_3, b_4, b_5, b_6 ≠ 0 ; partially DER, cash ratio, size, ROA, NPM, tax rate has an influence on DPR
2) Acceptance criteria as follows:
   a) Accept H_0 if $t_{tabel} \leq t_{count} \leq t_{tabel}$
   b) Deny H_0 (accept H_2) if $t_{count} > t_{tabel}$ or $t_{count} < t_{tabel}$

Factors Affecting Dividend Payout Ratio Policy
Debt to Equity Ratio

Debt to Equity Ratio (DER) is the ratio used to assess how much debt capital is used in comparison to equity capital in financing the assets of the company. Fundamentally, the higher the ratio will increase the financial risk of the company and reduces the capacity of the firm to pay dividend. The DER value for 2011-2015 can be seen in Figure 1
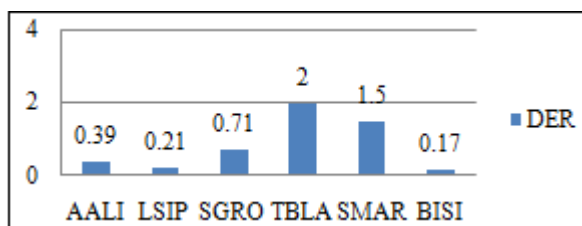
Figure 1: DER 2011-2015

Firmswhich have the highest and the lowest DER ratios are TBLA and BISI respectively. The average DER ratios of all sample firms is0.83.

Return On Equity

Return on Equity is a ratio that measures the profitability of the company. ROE is often used by shareholders to assess company performance. The higher the value of ROE value indicates the better the performance of the company. The average ROE value from 2011-2015 can be seen in Figure 2.
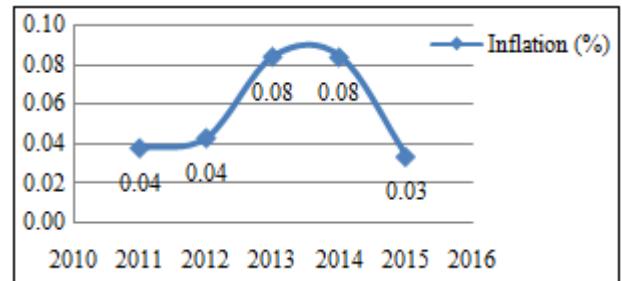

Figure 2: ROE 2011-2015

Figure 2 shows that AALI is the company with the highest ROE value, whereas BISI is the company with the lowest ROE value. From the investor's point of view, AALI is the best company to invest.

Inflation

Inflation is a continuous process of price increase which causes fall in purchasing power. This occurs because inflation reduces real income levels (Widjajanta and Widyaningsih, 2007). Excessive inflation figures will create a negative sentiment for share investors. This is because the rising prices of raw materials can lead to fall in profit which subsequently will reduce the amount of dividends that can be paid to investors. Trend of Inflation in Indonesia during the period of 2011-2015 can be seen in Figure 3.


Figure 3: Inflation Rate 2011-2015

Figure 3 shows that the inflation rate in Indonesia increased significantly in 2013 but decreased substantially in 2015. That is, although still classified as moderate inflation, the increase in inflation in 2013 resulted in decreasing purchasing power of Indonesia, and by 2015 the condition of Indonesia's economy has improved due to the decrease of the inflation rate to 3.35%.

Exchange rate

Exchange rate is the price of a currency against the currency of another country. Exchange rate plays an important role in spending decisions because exchange rate allows us to translate prices from different countries into the same currency (Ekananda, 2014). The changes of Indonesian Rupiah (IDR) from 2011 until 2015 can be seen in Figure 4
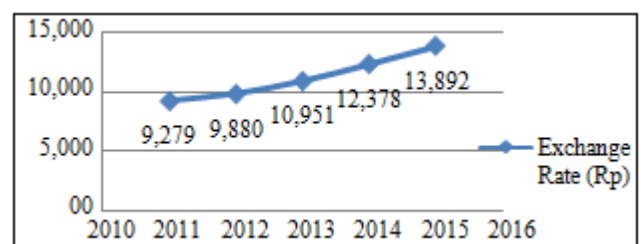
Figure 4: Exchange Rate of IDR to USD Year 2011-2015

From figure 4, it is clear thatIDR has continued to weaken against US Dollar where its value fell from IDR 9,279 in 2011 to IDR 13,892.00 in 2015.

Outcome
Classical Assumption Testing Results

This section provides the results of the classical assumption tests as described previously. The results are as follow:

a) Normality test

We use statistical test Non-Parametric Kolmogorov-Smirnov (K-S) to determine whether the data is normally distributed. It is found that the probability value of the test is 0.122477. Because the probability ishigher than the alpha value (0,05), therefore it can be concluded that the data used in this research is normally distributed.

b) Multicollinearity Test

Multicollinearity test results of this study indicate that there is no problem multicollinearity in the regression equation. This because all values of the correlation matrix of all variables are less than 0.8.

c) Autocorrelation Test

The DW value calculated on the Autocorrelation test result is 2,246. If we compared it to the table value with a significant level of 5% N = 30 and k = 4, we obtained the values of dl of 1.143 du of 1.739 4-du of 2,261 and 4-dl of 2.857. Therefore, because the DW value is between the du and the 4-dl values therefore we conclude that there is no autocorrelation.

d) Heteroscedasticity Test

The result of heteroscedasticity test in this study showed that residual values do not form a certain pattern.In other words the residual tend to be constant. So it can be concludedthat there is no heteroscedasticity in regression model.

Modeling and Results of Panel Data Regression

This study used panel data approach.We run three different panel data regression models namely Pooled Least Square model, Fixed Effect model, and Random Effect model. In order to select the best model, we conducted three tests including chow test, lagrange multipler test, and hausman test. The Chow test was performed to select the right model between pooled least square and fixed effect. At 95% significance, pooled least square model is accepted if p-value of cross section F is greater than 5%. Fixed effect model is selected if p-value of cross section F is smaller than 5%. The result of Chow test in this research shows that the probability value of cross section F is bigger than the alpha value. Thus, the pooled least square model is accepted and the lagrange multiplier test is no longer required. The results of pooled least square panel data regression model with weighting can be seen in Table 2.

Table 2: Variabel Indepdendent Value

Variabel	Coefficient	Std. Error	t-Statistic	Prob.
DER	-0.02121	0.03265	-0.64958	0.5219
ROE	7.53401	0.49075	15.3519	0.0000
Inflation	8.13533	4.78394	1.70051	0.1014
Exchange Rate	1.60035	0.42838	3.73583	0.0010
C	-16.0393	3.87759	-4.13642	0.0003
R-squared	0.91311			
Prob (F-statistic)	0.00000			

Source: PLSM Test Results (processed)

The equations resulting from the pooled least square model with weighting in the factor equations affecting the DPR are as follows:

$$Y = -16.03938 - 0{,}021213*DER_{it} + 7{,}534013*ROE_{it} + 8{,}135333*INFLATION_{it} + 1{,}600357*EXCHANGE\ RATE_{it} + e$$

Wherein:
Y : Dividend payout ratio
DER_{it} : Debt to equity value ratio i year t
ROE_{it} : Return on Equity value i year t
Inflation it : Inflation value i year t

EXCHANGE Rate it : The value of the Rupiah against the Dollar i year t

Hypothesis Testing

Based on Table 2, it can be seen that variables ROE and Exchange Rate has positive and significant effect on Dividend Payout Ratio. The positive sign of coefficient ROE is consistent with the hypothesis that changes in ROE will affect DPR in a way that if there is an increase in profits then the greater the chance of investors in obtaining dividends. This result is supported with research conducted by Suharli (2006).

The positive sign of variable Exchange Rate indicates that the depreciation of IDR against USD will increase the ability of agricultural firms to increase their dividend payment. This result is consistent with the hypothesis that changes in the exchange rate will affect the DPR positively and in accordance with the results of previous research conducted by Binastuti (2012). On the other hand, the estimated coeffients of variables DER and Inflation are statistically insignificant. The insignificant influence of variable inflation is due to the fact that most agricultural companies registered do not import raw materials.

F Test

F test was conducted to examine the influence of independent variable to the dependent variable simultaneously. With a significant level of 95%, the F test results can be seen in Table 4.

Table 3: Prob (F-statistic) Value

R Squared	Adjusted R-squared	S.E. of regression	Prob (F-statistic)	Durbin Watson Stat
0,913112	0,899210	1,009064	0,000000	2,246766

Source : PLSM Test Results (processed)

Table 4 shows that the probability of F (statistics) of 0.00000 is smaller than the value of alpha (0.05). Thus, it can be concluded that all the independent variables in the model jointly have significant influence to DPR policy.

Coefficient of Determination R^2

The value of the coefficient of determination (R^2) is used to measurethe overall goodness of fit of the estimated regression model. The results of the calculation coefficient of determination of this research can be seen in Table 5.

Table 4: R Squared Value

R Squared	Adjusted R-squared	S.E. of regression	Prob (F-statistic)	Durbin Watson Stat
0,913112	0,899210	1,009064	0,000000	2,246766

Source: PLSM Test Results (processed)

The coefficient of determination value of 0.913 means that about 91,3% of the variation in DPR is explained by the variation in the four explanatory variables.

3. Conclusion

Factors affecting the dividend payout ratio significantly and positively to the DPR are ROE and and Exchange Rate. Based on the coefficient of determination of independent

variables DER, ROE, Inflation, and Exchange Rate gives an influence to DPR of 91.3%, while the remaining 8.7% influenced by other factors.

4. Suggestion

This research only used 6 sample firms that continuously paid dividend for five year. So in the next study, it is advised to examine factors that have effect between companies that pay dividends continuously when the value of Rupiah weakened (period 2011-2015) with companies that did not pay dividend.

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