



The Effect of Dividend Policy on Stock Prices of LQ-45 Company in the Indonesia Stock Exchange

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Abstract- An investment choice is a dividend policy. Either the company's gains will be given to shareholders as dividends, or they will be maintained as earnings to finance future investments. The DPR and DY is the dividend policy indicators utilized in this study. This study seeks to examine the impact of DPR and DY on the share prices of LQ-45 businesses listed on the IDX. Use multiple linear regression analysis. The results indicated DPR and DY have no effect on the stock price of the LQ-45 companies registered on the IDX. According to multiple linear regression analysis results, obtained sig value $(0.606) > \alpha (0.05)$.

1. Introduction

The number of countries that already have capital markets demonstrates that the economic development of numerous nations, particularly Indonesia, is expanding rapidly. The capital market is where many long-term instruments are traded, including debt, equities (stocks), derivatives, and other instruments. The capital market plays a significant role in a nation's economy since it simultaneously serves economic and financial functions (Darmadji and Fakhrudin, 2011). Numerous countries' capital markets offer a number of benefits, including the provision of (long-term) financial resources to the business community and the optimal use of resources. This is what investors who wish to invest in companies through the capital market regard as being favorable.

An investment is an ongoing commitment to a pool of funds or other sources of funds with the aim of achieving a set of future returns (Tandelilin, 2010). The investment returns obtained by corporations whose shares are purchased by investors are used to finance the company's profit-generating operation. Profits earned or collected by the company may be disbursed to investors in the form of yields (dividends) or capital

gains and kept as the primary source of money to finance the company's expansion. The dividend policy defines the number of profit (dividend) or capital gain distributed to shareholder in the form of dividends.

The dividend policy of an assertive determines whether the company's profits will be disbursed to shareholders as dividends or held as maintained earnings to finance future expenditures. Investors interested in yield (dividends) or capital gains must be aware of the company's dividend policy. Information about dividend policy is important for the company because the dividend policy will show whether the company is doing well or not, making it more likely that potential investors will buy shares (Sartono, 2010).

In exchange for shares, shareholders have the right to demand dividends or other distributions made by the company to its shareholders, including reclamation rights on company assets, with priority after the claim rights of other shareholders have been satisfied in the event of liquidity, while the share price is an indication of the company's overall strength. Because if the company's stock price continues to climb, it indicates that the company and its management have performed exceptionally well. Investors must look at the financial health of the issuing company and the economy of the country to figure out how much money they can make and what risks they might face.

This stock price fluctuation is driven by a number of things, one of which is dividend policy information. Indicators for dividend policy include the DPR for the future and DY, which is the total return created by dividends (Khurniaji, 2013). The firm desires both the expansion of the company and the payout of dividends, yet these two objectives are in conflict with one another. By listing its shares on the IDX, the company was able to raise capital through an offering of shares (IDX). LQ-45 is one of the sub-sectors registered on the IDX. Using multiple linear regression analysis, the authors of this study aim to determine whether a dividend policy has an effect on the stock prices of LQ-45 firms.

Several academics, including Kusnanto (2007) and Aprilia (2013), have researched the effect of dividend policy on share prices, and their findings indicate that the DPR has no meaningful effect on stock prices. Fernandus's (2015) research also leads him to the conclusion that dividend yield doesn't have a big effect on share prices.

Regression analysis is used to determine the strength of the relationship between the independent and dependent variable. Simple linear regression applies when there is just one independent variable and one dependent variable. Multiple linear regression is a regression model with multiple independent variables. Multiple linear regression analysis was used to determine the direction and the effect of the independent variables on the dependent variable (Ghozali, 2018). In this study, one dependent variable (y), stock prices, is paired with two independent variables (x and z). dividend payout ratio (x_1) and dividend yield (x_2).

2. Methods

The study uses multiple regression analysis to check the effect of the dividend policies on the stock prices of companies on the LQ-45 IDX. This study's data will be analyzed using the SPSS software. Following are the steps taken in data analysis:

- (a) Test for determination coefficient. This test determines how well an example regression line fits the data. The coefficient of determination assesses how effectively the model can explain variations in the variable under consideration.
- (b) Determine whether the standard assumptions of multiple linear regression have been met. The conventional assumption test comprises:
 - (i) Multicollinearity test. This test whether there is a relationship between the independent variables in the regression model. If a correlation exists, then there is a multicollinearity issue. A good regression model should have no correlation between the independent variables. The used hypothesis is

$$H_0 : \text{The variables did not have any multicollinearity.}$$

$$H_1 : \text{There is a multicollinearity between the independent variables.}$$
 - (ii) Heteroscedasticity test. To verify the variant inequality in the regression model between the residuals of the observations. The hypothesis is:

$$H_0 : \text{There is no heteroscedasticity.}$$

$$H_1 : \text{There is heteroscedasticity.}$$

- (iii) Autocorrelation test. Check if the error in one period is related to the error, in the previous period in a regression model. Durbin-Watson is the test statistic that can be conducted. The used hypothesis is:
 H_0 : There is no autocorrelation.
 H_1 : There is auto correlation.
- (iv) Normality test. This test whether the regression model is the normal distribution. In this case, the Kolmogorov-Smirnov test is used to assess the normality of the data. The used hypothesis is:
 H_0 : Residuals are normally distributed.
 H_1 : Residuals aren't normally distributed.
- (c) If classical multiple linear regression does not exist, transform the data, and return to step 2.
- (d) A feasibility test for the regression model.
- (i) F Statistic Test. To see the effect of the x and y . The hypothesis is:
 H_0 : Nonlinear correlation between dependent and independent variables.
 H_1 : The independent variable and the dependent variable have at least one linear correlation.
- (ii) t-Statistic test. Explain the effect of each independent on the dependent variable. The hypothesis is:
 H_0 : There is no effect between x and y .
 H_1 : There is effect between x and y .
- (e) Interpret the result

3. Results and Discussion

(a) Description of Data

The data used is company data LQ-45 on the IDX in 2020. The dependent variable is stock price (y) and the independent variable are dividend payout ratio (x_1) dan dividend yield (x_2).

Result x_1 had the highest value of 132.01% and the smallest value of 0%. Dividend Yield has the highest value of 11.47% and the smallest value of 0%.

(b) Result

- (i) Coefficient of Determination Test (R^2)

Table 1. Results of the Analysis of the Coefficient of Determination

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.154 ^a	.024	-.023	87.472	1.889
a. Predictors: (Constant), TRANSFORM_X2, TRANSFORM_X1					
b. Dependent Variable: Stock Prices					

Test the coefficient of determination (R^2) indicates closely regression line sample corresponds to the data. Table 1 reveals that the proportion is 0.024 (2.4%). This indicates x_1 and x_2 factors influence 2.4% of the stock price. The left 97.6% is affected by factors that weren't investigated.

- (ii) Multiple Linear Regression Classical Assumption Check

a. Multicollinearity Test

The hypothesis put forward in this test is:

H_0 : There is no multiple linear relationship between y .

H_1 : There is multiple linear relationship between y .

This is the result of the multiple linear relationship test:

Table 2. Results of the multiple linear relationship test

Coefficients^a			
Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Dividend Payout Ratio	.670	1.492
	Dividend Yield	.670	1.492

a. Dependent Variable: Stock Prices

According to Table 2, tolerance value of each y is bigger 0.1 and the value of the VIF < 10 . The conclusion is that H_0 is acceptable. This indicates that there is no multicollinearity between x_1 and x_2 variables in the regression model, making it appropriate for further examination. The findings of these computations can explain why the previously stated premise that there is no multicollinearity between x_1 and x_2 is supported.

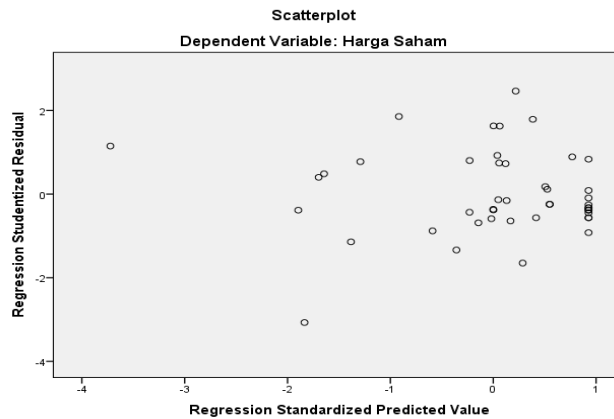
b. Heteroscedasticity Test

The hypothesis put forward in this test is

H_0 : There is no heteroscedasticity.

H_1 : There is heteroscedasticity.

The results of the heterogeneity test are shown in Fig:

**Figure 1.** Heteroscedasticity Test Results

From Figure 1, we know that there is a fuzzy pattern that scatters above and below the number 0 on the Y-axis, we conclude H_0 is acceptable. This means that there isn't any relationship between the size of the data and the residual values. Therefore, increasing the amount of data does not increase the (false) residual value and is not suitable for further analysis. The results of these calculations can explain why the hypothesis stated earlier can be proven.

c. Autocorrelation Test

The hypothesis put forward in this test is

H_0 : There is no autocorrelation between dividend payout ratio (x_1), dividend yield (x_2).

H_1 : There is an autocorrelation between dividend payout ratio (x_1), dividend yield (x_2).

Here are the autocorrelation test results:

Table 3. Autocorrelation Test Results

Model Summary^b	
Model	Durbin-Watson
1	1.912

It is known from Table 3 that the Durbin-Watson is 1.912 The conclusion then is that H_0 is accepted. This indicates that the regression model is suitable for further study because there is no link between the dividend payout ratio and dividend yield. These calculations illustrate why the previously stated hypothesis can be demonstrated.

d. Normality Test

The hypothesis put forward in this test is

H_0 : Residual x_1 and x_2 are normally distributed.

H_1 : Residual x_1 and x_2 are not normally distributed.

Below is the result of the normality test:

Table 4. Normality Test Results

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		45
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	84.50133682
Most Extreme Differences	Absolute	.137
	Positive	.137
	Negative	-.113
Test Statistic		.137
Asymp. Sig. (2-tailed)		.035 ^c
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		

Based on Table 4, the significance value of the 1-sample normality test result using the Kolmogorov-Smirnov test is 0.035. Residual normality testing with the One-Sample Kolmogorov-Smirnov Test shows that H_0 is rejected.

(iii) Performing Data Transformation

One of the four fundamental assumptions of multiple linear regression has not been met, namely residual data aren't normally distributed; data modification is performed in accordance with this difficulty. Then return to step 2.

a. Multicollinearity Test

The hypothesis put forward in this test is

H_0 : There is no multicollinearity between independent variables consisting of dividend payout ratio (x_1) and dividend yield (x_2).

H_1 : There is multicollinearity between independent variables consisting of dividend payout ratio (x_1) and dividend yield (x_2).

The following are the results of the multicollinearity test after the transformation:

Table 5. Multicollinearity Test Results After Transformation

Coefficients ^a			
Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	TRANSFORM_X1	.324	3.089
	TRANSFORM_X2	.324	3.089
a. Dependent Variable: Stock Prices			

Based on Table 5, it is known that the tolerance value of each y is more than 0.1 and $VIF < 10$. H_0 is accepted. This means no multicollinearity among the y in the regression model and it is suitable for further analysis. The results of these calculations can explain why it was said earlier that there is no way to prove that there is multicollinearity between y .

b. Heteroscedasticity Test

The hypothesis put forward in this test is

H_0 : There is no heteroscedasticity.

H_1 : There is heteroscedasticity.

The results of the mutant heterogeneity test are shown below. The results of the covert elasticity test are presented below:

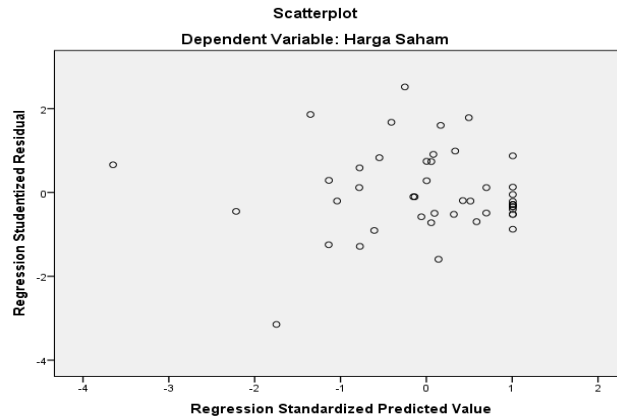


Figure 2. Heteroscedasticity Test Results After Transformation

Based on Figure 2, it is known that the points are scattered with an unclear pattern above and below the number 0 on the Y axis, H_0 is accepted. This means that there is no correlation between the size of the data and the residuals, so increasing the size of the data will result in a large residual (error) and is not suitable for further analysis. The results of these calculations can explain how the previously stated hypothesis can be proven.

c. Autocorrelation Test

The hypothesis put forward in this test is

H_0 : There is no autocorrelation between x_1 and x_2 .

H_1 : There is an autocorrelation between x_1 and x_2 .

Below is the converted autocorrelation test result:

Table 6. Autocorrelation Test Results After Transformation

Model Summary ^b	
Model	Durbin-Watson
1	1.889

Based on Table 6, it is known that the Durbin-Watson value is 1.889. H_0 is accepted. This means there is no correlation x_1 and x_2 in the regression model and is suitable for further analysis. The results of these calculations can explain the previously stated hypothesis can be proven.

d. Normality Test

The hypothesis put forward in this test is

H_0 : Residual x_1 and x_2 are normally distributed.

H_1 : Residual x_1 and x_2 are not normally distributed.

Here is the output of the transformed normality test:

Table 7. Normality Test Results After Transformation

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		45
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	85.46135857
Most Extreme Differences	Absolute	.119
	Positive	.119
	Negative	-.103
Test Statistic		.119
Asymp. Sig. (2-tailed)		.118 ^c
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		

Based on Table 7, we have shown the importance of the normality test results with the One-Sample Kolmogorov-Smirnov Test is 0.118. The residual normality test using the One-Sample Kolmogorov-Smirnov test shows that H_0 is accepted. The data is normally distributed. The results of these calculations can explain why the hypothesis stated earlier can be proven. Since all the classical assumptions of multiple linear regression have been met, the next step is to see if the regression model is possible.

(iv) Conducting Feasibility Test of Regression Model

a. F Statistic Test

The hypothesis put forward in this test is

H_0 : The independent variables consisting of x_1 and x_2 it also has no significant effect on the dependent variable y .

H_1 : The independent variables consisting of x_1 and x_2 it also has significant effect on the dependent variable y .

The following are the results of the F statistic test:

Table 8. F Test Results

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7765.317	2	3882.658	.507	.606 ^b
	Residual	321360.328	42	7651.436		
	Total	329125.644	44			
a. Dependent Variable: Stock Prices						
b. Predictors: (Constant), TRANSFORM_X2, TRANSFORM_X1						

Based on Table 8, sig. If $(0.606) > \alpha (0.05)$, then we can conclude that H_0 is accepted, indicating that the independent variables consisting of x_1 and x_2 do not have a significant simultaneous impact x , the stock price. The results of these calculations can explain why the previously proposed hypothesis of no concurrent significant effect of the independent variables on the dependent variable can be proven.

b. t-Test

Below are the results of the t-test:

Table 9. t-Test Results

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	24.070	22.806		1.055	.297
	TRANSFORM_X1	2.509	6.629	.101	.378	.707
	TRANSFORM_X2	-22.466	26.669	-.226	-.842	.404

a. Dependent Variable: Harga Saham

Based on Table 9, the results of the t-test can be described as follows:

1) Test Dividend Payout Ratio (x_1)

The hypothesis put forward in this test is

H_0 : The explanatory variable payout ratio x_1 does not significantly affect the dependent variable stock price (y).

H_1 : The explanatory variable payout ratio x_1 has a large impact on the dependent variable stock price (y).

Based on the data, its value can be seen of sig. For the dividend payout ratio (x_1) variable is 0.707. Because the value of sig. (0.707) > α (0.05) H_0 is accepted which states that the dividend payout ratio (x_1) has no significant effect on stock prices (y) in companies registered on the IDX. The results of these calculations can explain that the hypothesis stated previously that there is no significant effect of the independent variable on the dependent variable can be proven.

2) Test Dividend Yield (x_2)

The hypothesis put forward in this test is

H_0 : The independent variable dividend yield (x_2) does not significantly affect the dependent variable stock price (y).

H_1 : The explanatory variable dividend yield (x_2) has a significant affect on the dependent variable stock price (y).

Based on the data, its value can be seen of sig. For the dividend yield (x_2) variable is 0.404. Because the value of sig. (0.404) > α (0.05) H_0 is accepted which states that dividend yield (x_2) has no significant effect on stock prices (y) in company registered on the IDX. The results of these calculations can explain that the hypothesis stated earlier that there is no significant effect of the independent variable on the dependent variable can be proven.

(v) Interpreting Results

From the above results, we can see that the variables x_1 and x_2 do no important impact on the stock prices of LQ-45 companies on the IDX.

(c) Discussion

See calculation results the x_1 and x_2 have no important effect about the share price. Multiple linear regression analysis results demonstrate that the resultant sig value (0.606) > α (0.05), hence H_0 is acceptable. The findings of the computation above indicate that an increase or decrease in the dpr and dy has no effect on the increase in stock prices. This study demonstrates that a company's ability to improve its dividend payout ratio and dividend yield will not result in an increase in the price of its individual shares. A dividend payout ratio measures the proportion of dividends delivered to net income after taxes. The distribution of dividends is a factor that investors examine when opting to purchase a stock. With the distribution of dividends, investors can evaluate the company's prospects. This shows that dividends are a signal for investors to allocate capital in the form of shares. Potential investors do not base their selections on a company's dividend policy.

4. Conclusion

Based on our research and discussion, we can conclude with a 95% confidence level that there is no impact of x_1 and x_2 on LQ-45 companies' share prices on the IDX.

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