

# Analysis of Factors Affecting Dividend Policy with Firm Size as a Moderating Variable in the Consumer Goods Company Listed on Indonesia Stock Exchange

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## ABSTRACT

This research delves into the effects of profitability, liquidity, leverage, free cash flow, and managerial ownership as factors affecting dividend policy in the consumer goods companies listed on the Indonesia Stock Exchange in the period of 2016-2020. Firm size, serving as a moderating variable, is also addressed. The population consists of the consumer goods companies listed on Indonesia Stock Exchange from 2016 to 2020, resulting in 50 observation data. This research uses secondary data and performs panel data regression analysis with multiple linear regression tests and interaction moderation tests using EVIEWS software to test the hypothesis. The findings indicate that profitability has a positive and significant effect on dividend policy. Managerial ownership has a negative and significant effect on dividend policy. Liquidity, Leverage, and Free Cash Flow, on the other hand, do not affect dividend policy. It is also found that firm size cannot moderate profitability, liquidity, leverage, free cash flow, and managerial ownership on Dividend Policy.

**Keywords:** profitability, liquidity, leverage, free cash flow, managerial ownership, dividend policy, firm size.

## INTRODUCTION

The dividend is the distribution of company income, a shareholder right in cash, assets, or other forms. A dividend policy is a policy to share profits with shareholders to be distributed in the form of dividends and the amount of retained earnings for business

development needs. The proportion paid to shareholders depends on the company's ability to generate profits and dividend policies. The percentage of profit paid to shareholders in dividends is called the Dividend Payout Ratio (DPR). The greater dividend distribution tends to increase stock prices, increasing company value. The greater the profit, the greater the dividend percentage so that the stock price increases. PT Gudang Garam Tbk (GGRM) decided not to distribute dividends from net profit for the 2019 fiscal year. This decision was determined in the Annual General Meeting Of Shareholders, held on Friday, August 28, 2020. The results of the General Meeting of Shareholders decided that the GGRM profit was all allocated as retained earnings. As a result, the GGRM stock price when the announcement fell 5%. Even though the net profit after the GGRM tax last year grew 40% annually. Furthermore, GGRM overcame the impact of Covid-19 better than its competitors, PT HM Sampoerna Tbk (HMSP). Gudang Garam (GGRM) also has the sufficient cash flow to pay dividends even afterward, spending capital expenditure of Rp 3 trillion - Rp 4 trillion for the airport project. This decision is a step that has never existed before in the last 30 years. GGRM did not pay dividends only in 2001 (Nurdiana, 2020).

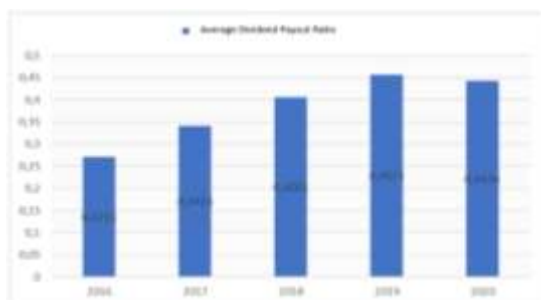
Kimia Farma's Annual General Meeting of Shareholders decided not to deposit dividends on business activities in the 2019 fiscal year. Kimia Farma President Director

Verdi Budidarmo said the dividend deposit was eliminated because the company suffered business losses last year of Rp12.72 billion. The profit of the pharmacy issuer was held back due to an increase in the cost of goods sold, which increased from Rp5.09 trillion - Rp5.89 trillion. Not only that, but operating expenses also rose from Rp2.59 trillion to Rp3.21 trillion. Then the currency exchange rate burden also increased from Rp2.58 billion to Rp5.05 billion. In addition, the financial burden also jumped from Rp227.21 billion to Rp497.96 billion. However, despite losses, Kimia Farma pocketed revenue of Rp9.4 trillion in 2019, or an increase of 11.12 percent from 2018, which amounted to Rp8.45 trillion. In 2019, the company recorded some liabilities of Rp10.93 trillion. While, the amount of equity amounted to Rp7,412 trillion (Artanti, 2020).

Here are some phenomena regarding the measured dividend policy using the dividend payout ratio at the consumer goods company listed on the Indonesia Stock Exchange from 2016 to 2020.

There were 38 issuers of the consumer goods company listed on the Indonesia Stock Exchange during the 2016-2020 period. 13 issuers had never distributed dividends from 2016 to 2020, and 9 issuers distributed their dividends not consistently. So there were only 18 issuers distributing dividends regularly every year from 2016 to 2020.

The following is presented the average value of the dividend payout ratio of the consumer goods company listed on the Indonesia Stock Exchange from 2016 to 2020. The average value of the dividend payout ratio can be seen in the following picture:



Source: Data processed by researchers, 2022  
Figure 1. Average Dividend Payout Ratio

The picture above showed a fluctuation in the average value of the dividend payout ratio from 2016 to 2020. From 2016 to 2019, the average value of the dividend payout ratio of the consumer goods company increased every year. The dividend payout ratio in 2016 was at 0.2711, in 2017 was 0.3414, in 2018 was 0.4061, and in 2019 was 0.4572. While, the impairment of the average value of the dividend payout ratio of the consumer goods company occurred in 2020, where the average value of the 2020 dividend payout ratio was 0.4436 lower than the average value of the 2019 dividend payout ratio which was 0, 4572.

There are other phenomena regarding the factors that influence dividend policies that can be seen in the following initial observation table:

Table 1. Initial Observation

Issuer Code	Year	ROA	Current Ratio	DER	Free Cash Flow	Managerial Ownership	DPR
TBLA	2018	0.0468	1.8794	2.4358	-Rp 774.762.000.000	0.0009	0.2519
	2019	0.0381	1.6268	2.2376	Rp 485.239.000.000	0.0009	0.1747
	2020	0.0350	1.4986	2.2997	-Rp 518.643.000.000	0.0009	0.1996
TSPC	2018	0.0687	2.5162	0.4486	-Rp 77.131.221.153	0.0005	0.3230
	2019	0.0711	2.7808	0.4458	Rp 561.087.624.123	0.0005	0.3331
	2020	0.0916	2.9587	0.4277	Rp 534.862.317.217	0.0005	0.3781

Source: Data processed by researchers, 2022

The table shows the issuers included in the initial observation: TBLA or PT Tunas Baru Lampung Tbk. and TSPC issuers or Tempo Scan Pacific Tbk. In TBLA issuers, the return on asset value in 2020 decreased. The return on asset value in 2019 was at 0.0381, which in 2020 was at 0,0350. While the dividend payout ratio value in 2020 increased, the value of the dividend payout ratio in 2019 was at 0.1747, which in 2020 was at 0.1996. It also occurred in the current ratio value in 2020, which decreased, while the value of the dividend payout ratio in 2020 increased. It shows the discrepancy of the concept, which states that the decreasing the value of return on assets and the current ratio, the lower the value of the dividend payout ratio. Likewise, the value of the debt-to-equity ratio in 2018, 2019, and 2020

experienced fluctuations in the same direction as the value of the dividend payout ratios in 2018, 2019, and 2020, which were based on the theory that the debt-equity ratio and dividend payout ratio have a different relationship.

In TSPC issuers, the free cash flow value and managerial ownership in 2020 decreased while the value of the dividend payout ratio increased. It shows the discrepancy of the concept, which states that the decreasing value of free cash flow and managerial ownership, the lower the value of the dividend payout ratio.

## **LITERATURE REVIEW**

### **Dividend Policy**

According to Ambarwati et al. (2015), the dividend policy is a policy taken by the company's management to pay a portion of the company's profits to shareholders rather than hold it as revenue detained to be invested in shareholders and investing in getting capital gains.

Lease et al. (2000) in Gumanti (2013) define dividend policy as "The practice that management follows in making dividend payout decisions or, in other words, the size and pattern of cash distributions over time to shareholders." According to this definition, dividend policy is a practice carried out by management in making dividend payment decisions, which includes the amount of rupiah, and the pattern of cash distribution to shareholders.

According to Sartono (2017), the definition of dividend policy is an available investment opportunity, availability and alternative capital costs, and shareholder preferences to receive current income or receive it in the future.

Based on some of the explanations above, it can be concluded that a dividend policy is a policy carried out by management to decide whether the profit obtained by the company will be distributed to shareholders as dividends or will be detained in the form of retained earnings for investment financing in the future. If

the company chooses to distribute profits as dividends, it will reduce the retained earnings and the total source of internal funds or internal financing. In this study, dividend policy was measured using the Dividend Payout Ratio. The dividend Payout Ratio can be calculated using the following formula:

$$\text{Dividend Payout Ratio} = \frac{\text{Dividend Per Share}}{\text{Earning Per Share}}$$

Factors that are suspected of being able to influence dividend policies include profitability, Ginting (2018); Krisardiyansah & Amanah (2020); Mauris & Rizal (2021). Liquidity, Jabbouri (2016); Krisardiyansah & Amanah (2020); Nurchaqiqi & Suryarini (2018). Leverage, Jabbouri (2016); Kuzucu (2015); Trisna & Gayatri (2019). Free cash flow, Sakir & Fadli (2014); Trisna & Gayatri (2019). Managerial ownership, Dewi (2008); Ismiati & Yuniati (2017); Sakir & Fadli (2014).

### **Profitability**

Profitability is the ability to generate profits (Prihadi, 2019). Meanwhile, according to Danang (2013), profitability is the company's ability to benefit from its business results. Profitability assessment is a process to determine how well business activities are carried out to achieve strategic goals, eliminate waste and present timely information to improve on an ongoing basis. Thus, long-term investors will be very interested in this profitability analysis (Simamora, 2000). Profitability shows the success of a business entity in producing a return (return) to its owner (Harahap, 2018). The company's ability to pay dividends is a function of profits. Thus, the company needs profitability if management wants to pay dividends. Profitability affects the number of dividends to be distributed by the company. Profitability for companies is the ability to use specific working capital to generate certain profits. So that the company does not experience difficulties returning its debts, short-term or long-term debt, and dividend

payments for investors who invest their capital in the company. The higher the company's profitability level, the smoother dividend payment to investors.

Research by Mauris & Rizal (2021) shows that profitability positively and significantly affects dividend policies. The results of research conducted by Ginting (2018) support that profitability has a significant positive effect on dividend policy. Likewise, the results of research conducted by Krisardiyansah & Amanah (2020) show that profitability positively affects dividend policy. These results are not in line with the results of research conducted by Rais & Santoso (2017); and Sari & Budiasih (2016), who states that profitability does not affect dividend policy.

In this study, profitability was measured using Return On Assets. Return On Assets can be calculated using the following formula:

$$\text{Return On Asset} = \frac{\text{Earning After Tax}}{\text{Total Asset}}$$

### **Liquidity**

Liquidity indicates the company's ability to pay all short-term financial liabilities at maturity using the available current assets (Syamsudin, 2016). According to Munawir (2014), liquidity shows the ability of a company to fulfill its financial obligations that must be fulfilled immediately or the company's ability to fulfill financial obligations when billed. According to Kasmir (2015), liquidity is a ratio to show or measure the company's ability to fulfill its obligations that are due, both obligations to outside parties (business entities) and within the company (company liquidity).

Company liquidity is an essential factor that must be considered before deciding to determine the amount of dividend that will be distributed because dividends are outflows. The stronger the liquidity position, the greater the company's ability to pay dividends (Riyanto, 2008). In companies with a high level of liquidity, the company can meet all short-term obligations,

including by paying dividends to capital owners.

Research conducted by Jabbouri (2016) shows that liquidity has a significant positive effect on dividend policies. Nurchaqiqi & Suryarini (2018), in their research, also shows that liquidity has a positive effect on dividend policy. While, previous research by Lismawati & Suryanto (2017) shows that liquidity does not affect dividend policy. These results are supported by research conducted by Ginting (2018) that liquidity has no significant effect on dividend policy. In this study, liquidity is measured by the Current Ratio. The Current Ratio can be calculated using the following formula:

$$\text{Current Ratio} = \frac{\text{Current Asset}}{\text{Current Liability}}$$

### **Leverage**

According to Kasmir (2015), leverage is the ratio used to measure the extent to which a company's activities are financed with debt. In line with what was disclosed by Kasmir (2015), this definition of leverage was reaffirmed by Fahmi (2020), who stated that leverage is a measure of how much a company is financed with debt. The use of debt that is too high will endanger the company because the company will be included in the extreme leverage category, namely, the company is trapped in a high level of debt and will find it difficult to release the debt burden. Brigham & Houston (2018) states that the leverage ratio is a ratio that measures the extent to which the company uses funding through debt (financial leverage) so that we can see the company's ability to optimize debt.

High use of debt will cause a decrease in dividends because most of the benefits are allocated as debt repayment reserves. If the company has a large debt that must be paid immediately, it will likely reduce the number of dividend payments or postpone its dividend payments (Gumanti 2013). The higher the company's debt value will cause a decline in dividends because the profits obtained by the company will be allocated as



debt payments. However, if the company's debt value is low, the company will distribute high dividends.

Research conducted by Jabbouri (2016), Kuzucu (2015), and Trisna & Gayatri (2019) found that leverage has a negative and significant influence on dividend policy. While, previous research by Lismawati & Suryanto (2017) found that leverage did not significantly affect dividend policy. Supported by the results of research conducted by Ginting (2018), leverage does not affect dividend policy.

In this study, leverage was measured using the Debt To Equity Ratio. The Debt To Equity Ratio can be calculated using the following formula:

$$\text{Debt To Equity Ratio} = \frac{\text{Total Liability}}{\text{Total Equity}}$$

### Free Cash Flow

Sartono (2017) states that free cash flow is the cash flow available to investors after the company invests in fixed assets and working capital to maintain its business continuity. Hadi et al. (2013) state that Free Cash Flow (FCF) is the amount of cash flow available to the firm to purchase an investment, make dividends, make debt repayment, or increase liquidity. Brigham & Houston (2018), free cash flow is a cash flow available to investors (shareholders and debt owners) after the company invests in fixed assets, new products, and working capital needed to maintain the ongoing operation.

Dividend payments, primarily cash dividends, depend highly on the available cash position. Companies with high cash flow levels should pay high dividends as well. The results of previous studies by Sakir & Fadli (2014) stated that free cash flow had a positive and significant effect on dividend policies. In contrast, other research by Krisardiyansah & Amanah (2020) shows that free cash flow does not influence dividend policy. Free cash flow can be calculated using the following formula:

$$\text{Free Cash Flow} = \text{Cash Flow From Operating Activities} - \text{Capital Expenditure}$$

### Managerial Ownership

Wahyudi & Pawestri (2011) stated that managerial ownership, namely management, actively participate in company decision-making. Managerial parties with the proportion of shareholders include the Director and the Board of Commissioners. In his involvement, managers will act cautious because they will bear the consequences of their decisions. The manager will be more motivated to improve the company's management.

In agency theory, all individuals act in their interests. Shareholders as principals are only interested in increasing financial results or their investment within the company. While, the managers as agents receive satisfaction through financial compensation. Because of these differences in interests, each party tries to increase its profits. Rozeff (1982) in Henry (2013) stated that high managerial ownership causes dividends to be paid to low shareholders. Low dividends are determined due to managers having investment expectations in the future financed from internal sources.

Sakir & Fadli's (2014) research states that managerial ownership negatively affects dividend policies. While, Rais & Santoso's research (2017) showed that managerial ownership did not affect dividend policies.

According to Jensen & Meckling (1976), the formula for managerial ownership, namely:

$$\text{Managerial Ownership} = \frac{\text{Number of Shares Owned by Management}}{\text{Number of Outstanding Shares Owned at the End of the Year}}$$

### Firm Size

According to Brigham & Houston (2018), company size is a company's size shown or assessed by total assets, total sales, profits, tax expenses, and others. According to Hartono (2017), company size (firm size) is the size of the company that can be measured by the total assets/size of the company's assets by using the calculation of the logarithmic value of total assets. Then according to Consoladi in Oktaviani (2014) said that company size can affect corporate social performance because large companies

have a more distant view, so they participate more in growing corporate social performance.

From this definition, the authors conclude that company size is the value of the size of the company as indicated by total assets, total sales, and total profits, thus affecting the company's social performance and causing the achievement of company goals.

Based on the phenomena that have been previously presented, researchers add firm size as a moderation variable. Firm size is chosen as a moderation variable because large companies tend to have easier access to the capital market, affecting the company's ability to obtain large amounts of funds. After all, the funds obtained are used to pay dividends to shareholders. Therefore, the greater company size will increase the dividend value distributed (Idawati & Sudiarta, 2014). Companies that have large total assets indicate that the company has reached the maturity stage. So that the cash flow is positive because there is not much funding needed for investment, and it is considered to have good prospects for a relatively long period. This condition will benefit shareholders in terms of dividend distribution. Firm size can be calculated using the following formula:

$$\text{Firm Size} = \ln \text{Total Asset}$$

### Framework

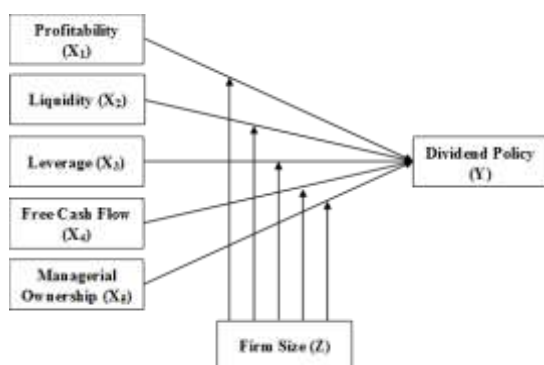


Figure 2. Framework

H1: Profitability has a positive effect on dividend policy.

H2: Liquidity has a positive effect on

dividend policy.

H3: Leverage has a negative effect on dividend policy.

H4: Free cash flow has a positive effect on dividend policy.

H5: Managerial ownership has a negative effect on dividend policy.

H6: Firm size can moderate the effect of profitability on dividend policies.

H7: Firm size can moderate the effect of liquidity on dividend policy.

H8: Firm size can moderate the effect of leverage on dividend policy.

H9: Firm size can moderate the effect of free cash flow on dividend policy.

H10: Firm size can moderate managerial ownership's effect on dividend policies.

### MATERIALS & METHODS

The research design in this study is causal associative, namely research that aims to determine the causal relationship between various variables (Erlina, 2011). This study uses independent variables, namely Profitability (X<sub>1</sub>), Liquidity (X<sub>2</sub>), Leverage (X<sub>3</sub>), Free Cash Flow (X<sub>4</sub>), and Managerial Ownership (X<sub>5</sub>). The Dividend Policy is the dependent variable (Y), and a moderating variable, Firm Size (Z).

The population of this study consisted of all consumer goods companies listed on the Indonesia Stock Exchange during the 2016-2020 period, namely 38 companies. While the selection of samples in this study was carried out using the purposive sampling method. Purposive sampling is a sample determination technique using specific considerations (Sugiyono, 2014). The sample was chosen using the following criteria:

1. Consumer goods companies listed on the Indonesia Stock Exchange during the 2016-2020 period.
2. Companies that always distribute dividends during the 2016-2020 period.
3. Companies that always generate profits during the 2016-2020 period.
4. Companies that have managerial ownership during the 2016-2020 period.

Based on these criteria, researchers obtained 10 companies sampled in this study so that the total sample is 50 (10 companies x 5 years of study).

The data analysis technique using the software Eviews tools. Data were analyzed by the panel data regression analysis method and moderating testing.

## RESULT

### 1. Descriptive Statistical Analysis

Table 2. Descriptive Statistics Test Results

	(Y)	(X <sub>1</sub> )	(X <sub>2</sub> )	(X <sub>3</sub> )	(X <sub>4</sub> )	(X <sub>5</sub> )	(Z)
Mean	0.382292	0.108041	2.296037	0.992141	1.42E+12	0.070113	29.66720
Median	0.331000	0.069673	2.064802	0.802770	2.13E+11	0.002707	30.00214
Maximum	1.041793	0.446758	4.843633	3.159024	9.40E+12	0.481726	32.72561
Minimum	0.018608	0.000500	0.605632	0.163544	-1.30E+12	1.00E-05	26.71307
Std. Dev.	0.245862	0.101103	1.353560	0.845593	2.65E+12	0.122852	1.554808

Source: Data processed by researchers, 2022

The table above shows the results of the descriptive statistical analysis as follows:

1. The minimum value of the Dividend Policy (Y) is at the PT. Ultra Jaya Milk Industry & Trading Tbk in 2016. In contrast, the maximum value of the Dividend Policy (Y) is at the PT. Unilever Indonesia Tbk in 2016.
2. The minimum value of Profitability (X<sub>1</sub>) is at the PT. Chitose Internasional Tbk in 2020. In contrast, the maximum value of Profitability (X<sub>1</sub>) is at the PT. Unilever Indonesia Tbk in 2018.
3. The minimum value of Liquidity (X<sub>2</sub>) is at the PT. Unilever Indonesia Tbk in 2016. In contrast, the maximum value of Liquidity (X<sub>2</sub>) is at the PT. Ultra Jaya Milk Industry & Trading Tbk in 2016.
4. The minimum value of Leverage (X<sub>3</sub>) is at the PT. Ultra Jaya Milk Industry & Trading Tbk in 2018. While the maximum value of Leverage (X<sub>3</sub>) is at the PT. Unilever Indonesia Tbk in 2020.
5. The minimum value of Free Cash Flow (X<sub>4</sub>) is at the PT. Indofood Sukses Makmur Tbk in 2018. In contrast, the maximum value of Free Cash Flow (X<sub>4</sub>) is at the PT. Indofood Sukses Makmur Tbk in 2020.
6. The minimum value of Managerial Ownership (X<sub>5</sub>) is at the PT. Unilever

Indonesia Tbk. Meanwhile, the maximum value of Managerial Ownership (X<sub>5</sub>) is at the PT. Ultra Jaya Milk Industry & Trading Company Tbk in 2020.

7. The minimum value of Firm Size (Z) is at the PT. Chitose Internasional Tbk in 2016. In contrast, the maximum value of Firm Size (Z) is at the PT. Indofood Sukses Makmur Tbk in 2020.

### 2. Model Selection Test

Panel data regression can be done with three models: common effect, fixed effect, and random effect. Each model has its advantages and disadvantages. The choice of the model depends on the assumptions used by the researcher and the fulfillment of the correct statistical data processing requirements so that they can be accounted for statistically. Therefore, the first step that must be done is to choose a model from the three available. The Chow, Hausman, and Lagrange multiplier tests were carried out in this study.

#### a) Determination Of The Estimated Model Between the Common Effect Model (CEM) And Fixed Effect Model (FEM) With the Chow Test.

The Chow Test determines whether the estimation model is CEM or FEM in forming a regression model. The hypothesis being tested is as follows.

H<sub>0</sub>: The CEM model is better than the FEM model.

H<sub>1</sub>: FEM model is better than the CEM model.

Table 3. Chow Test Results

Redundant Fixed Effects Tests			
Equation: Untitled			
Test cross-section fixed effects			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	3.939716	(9,34)	0.0016
Cross-section Chi-square	35.717689	9	0.0000

Source: data processed by EViews, 2022

The rules for making decisions on hypotheses are as follows:

1. If the Cross-Section Chi-Square Probability value  $< 0.05$ ,  $H_0$  is rejected, and  $H_1$  is accepted.
2. If the Cross-Section Chi-Square Probability value  $\geq 0.05$ ,  $H_0$  is accepted, and  $H_1$  is rejected.

The table above shows that the Probability value is 0.0000. Because the Probability value is  $0.0000 < 0.05$ , the estimated model used is the Fixed Effect Model (FEM) model.

**b) Determination Of the Estimated Model Between the Fixed Effect Model (FEM) And Random Effect Model (REM) With the Hausman Test.**

In determining whether the FEM or REM estimation model in forming a regression model, the Hausman Test is used. The hypothesis used in the Hausman Test is as follows:

1.  $H_0$ : The best estimation model for use is the Random Effect Model.
2.  $H_1$ : The best estimation model for use is Fixed Effect Model.

If the Probability value is  $\geq 0.05$ , then  $H_0$  is received. However, if the Probability value is  $< 0.05$ , then  $H_1$  is accepted.

**Table 4. Hausman Test Results**

Correlated Random Effects - Hausman Test  
Equation: Untitled  
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	8.977231	6	0.1749

Source: data processed by EViews, 2022

The table above shows the Probability value of Cross-Section Random, which is  $0.1749 > 0.05$  so that  $H_0$  is received. So the Random Effect Model (REM) is more appropriate for this study.

**c) Determination Of The Estimated Model Between The Common Effect Model (CEM) And The Random Effect Model (REM) With The Multiplier Lagrange Test.**

This Multiplier Lagrange Test determines whether a Random Effect Model is better

than the Common Effect (OLS) Method, so the Multiplier Lagrange Test (LM) is used. The LM Test hypothesis is:

1.  $H_0$ : The best estimation model for use is the Common Effect Model
2.  $H_1$ : The best estimation model for use is the Random Effect Model

If the Probability value is  $\geq 0.05$ , then  $H_0$  is received. If the Probability value is  $< 0.05$ , then  $H_1$  is accepted.

**Table 5. Multiplier Lagrange Test Results**  
Lagrange Multiplier Tests for Random Effects  
Null hypotheses: No effects  
Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided (all others) alternatives

	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	2.262335 (0.1326)	2.091247 (0.1481)	4.353582 (0.0369)

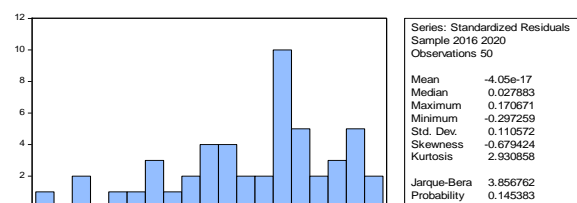
Source: data processed by EViews, 2022

The table above shows the value of Cross-Section One-Side is shown by the lowest Breusch-Pagan number, which is 0.1326, where the value is greater than 0.05, so this Multiplier Lagrange Test shows that receiving  $H_0$  and rejecting  $H_1$ , which means the best estimation method is the CEM.

**3. Classic Assumption Test**

**a) Normality Test**

The results of the normality test from the EViews 9 application can be reached by the Jarque-Berra (JB Test) Testing, Normal Hypothesis Testing. If the Probability value of the JB Test  $> 0.05$ , then the data is normally distributed. If  $< 0.05$ , then the data is not normally distributed.



Source: data processed by EViews, 2022

Figure 2. Normality Test Results

The normality test results in the picture above can be seen in the Probability value of the Jarque-Berra (JB) can be declared normal if the Probability value  $> 0.05$ . The data



processing results show a value of 0.145383, which is more than 0.05, so it can be concluded that the data is normally distributed.

**b) Multicollinearity Test**

A multicollinearity test is carried out to determine whether there is a high correlation between the independent variables in the linear regression model. In this study, multicollinearity symptoms can be seen from the VIF value. Ghozali & Ratmono (2017) states that if the VIF value > 10, this indicates multicollinearity.

**Table 6. Multicollinearity Test Results**

Variable	VIF
X1	2.192786
X2	2.620226
X3	3.041116
X4	2.272607
X5	1.187019
Z	1.515359

Source: data processed by EViews, 2022

The table above shows no symptoms of multicollinearity between independent variables. It is because the VIF value in each variable is less than 10.

**c) Heteroscedasticity Test**

A heteroscedasticity test is carried out to test whether this research model has symptoms of heteroscedasticity. If there are heteroscedasticity symptoms, this shows uniformity in the variation of the model and causes the error to be inconsistent. Heteroscedasticity testing can be done with Bruesch Pagan Godfrey. Testing Bruesch Pagan Godfrey can be concluded whether there is a heteroscedasticity problem by looking at the Prob. Chi-Square. As for the provisions, if the Prob. Chi-Square <  $\alpha$  (or  $\chi^2$  stat >  $\chi^2$  table), it can be concluded that there is a heteroscedasticity problem.

**Table 7. Heteroscedasticity Test Result**

Heteroscedasticity Test: Bruesch-Pagan-Godfrey			
F-statistic	1.266128	Prob. F(6,43)	0.2930
Obs*R-squared	7.507166	Prob. Chi-Square(6)	0.2765
Scaled explained SS	8.565160	Prob. Chi-Square(6)	0.1996

Source: data processed by EViews, 2022

Based on the table above, it is known that the Probability of the independent variable Chi-

Square is 0.2765 more than 0.05, so it can be concluded that there is no heteroscedasticity problem.

**d) Autocorrelation Test**

The autocorrelation test in this study was conducted using the Serial Correlation LM Test, where if the Probability value of Obs\*R-Squared on the model is greater than the actual level ( $\alpha = 5\%$ ) used, it can be concluded that the model does not experience symptoms of autocorrelation. Conversely, if the Probability value of Obs\*R-Squared in the model is smaller than the actual level ( $\alpha = 5\%$ ) used, it can be concluded that the equation model experiences autocorrelation symptoms.

**Table 8. Autocorrelation Test**

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	2.205070	Prob. F(3,40)	0.1024
Obs*R-squared	7.095548	Prob. Chi-Square(3)	0.0689

Source: data processed by EViews, 2022

The table above shows that the value of Probability Chi-Square in Obs\*R-Squared is 0.0689, which is greater than 0.05, so it can be concluded that there is no autocorrelation in this study.

**4. Hypothesis Testing**

**a) Coefficient of Determination Test**

The results of the coefficient of determination test can be seen in the following table:

**Table 9. Coefficient of Determination Test Results**

R-squared	0.836272	Mean dependent var	0.382292
Adjusted R-squared	0.815705	S.D. dependent var	0.248862
S.E. of regression	0.106836	Akaike info criterion	-1.505874
Sum squared resid	0.490795	Schwarz criterion	-1.238191
Log likelihood	44.64685	Hannan-Quinn criter.	-1.403939
F-statistic	37.14626	Durbin-Watson stat	0.815214
Prob(F-statistic)	0.000000		

Source: data processed by EViews, 2022

The table above shows that the value of the Adjusted R-Squared is 0,815705. It means that 81,57% of the dependent variable of dividend policy can be explained by the independent variable, namely profitability, liquidity, leverage, free cash flow, and managerial ownership. While, the remaining 18,43% is explained by other variables that are not included in this research model. It explains that independent variables have a

strong relationship because of the Adjusted R-Squared value above 80%.

**b) Partial Regression Test (T-Test)**

According to Ghazali & Ratmono (2017) that the t-test aims to show how far the influence of one explanatory or independent variable individually explains the dependent variable. Hypothesis testing will be done using a significance level of 0.05 ( $\alpha = 5\%$ ). Suppose the probability value of each independent variable (p-value) is less than the value  $\alpha$  (0.05). In that case, the independent variable can be said to have a significant influence on the dependent variable.

**Table 10. Statistical Test Results T**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X <sub>1</sub>	1.862901	0.223538	8.333723	0.0000
X <sub>2</sub>	-0.039239	0.019708	-1.991043	0.0529
X <sub>3</sub>	0.003479	0.031476	0.110540	0.9125
X <sub>4</sub>	-7.05E-15	8.67E-15	-0.812704	0.4209
X <sub>5</sub>	-0.624946	0.135352	-4.617187	0.0000
Z	0.032780	0.012084	2.712788	0.0096

Source: data processed by EViews, 2022

The table above shows that profitability has a significant and positive effect on dividend policy. Liquidity and free cash flow have no significant and negative effect on dividend policy. Leverage has no significant and positive effect on dividend policy. Managerial ownership has a significant and negative effect on dividend policy.

**5. Test Moderated Regression Analysis**

Moderated Regression Analysis (MRA) Test was conducted to see whether the moderating variable could strengthen or weaken the influence of the independent variable on the dependent variable.

**Table 11. MRA Test Results and Residual Test Results (Moderating)**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X1Z	0.491604	0.480699	1.022687	0.3129
X2Z	0.038131	0.028591	1.333672	0.1903
X3Z	0.108697	0.063824	1.703072	0.0967
X4Z	4.90E-15	1.12E-14	0.435770	0.6655
X5Z	0.232151	0.229610	1.011066	0.3184

Source: data processed by EViews, 2022

In testing moderation with the MRA Test approach, a variable is said to be moderating

if its significant value is less than 0.05 (Ghozali & Ratmono, 2017). It can be seen from the results of the MRA Test that all independent variables that have been multiplied by the moderating variable have a significant value greater than 0.05. It means that the model structure variable does not moderate the relationship between the independent and dependent variables.

**CONCLUSION**

The results of this study provide several conclusions that can be drawn based on the discussion of the problems that have been carried out. The following are the conclusions that the author has summarized in this study:

1. Profitability has a positive and significant effect on dividend policy in the consumer goods company listed on the Indonesia Stock Exchange for the 2016-2020 period.
2. Liquidity has no effect on dividend policy in the consumer goods company listed on the Indonesia Stock Exchange for the 2016-2020 period.
3. Leverage has no effect on dividend policy in the consumer goods company listed on the Indonesia Stock Exchange for the 2016-2020 period.
4. Free cash flow has no effect on dividend policy in the consumer goods company listed on the Indonesia Stock Exchange for the 2016-2020 period.
5. Managerial ownership has a negative and significant effect on dividend policy in the consumer goods company listed on the Indonesia Stock Exchange for the 2016-2020 period.
6. Firm size does not moderate profitability on dividend policy in the consumer goods company listed on the Indonesia Stock Exchange for the 2016-2020 period.
7. Firm size does not moderate liquidity on dividend policy in the consumer goods company listed on the Indonesia Stock Exchange for the 2016-2020 period.
8. Firm size does not moderate leverage on dividend policy in the consumer goods

company listed on the Indonesia Stock Exchange for the 2016-2020 period.

9. Firm size does not moderate free cash flow on dividend policy in the consumer goods company listed on the Indonesia Stock Exchange for the 2016-2020 period.
10. Firm size does not moderate managerial ownership on dividend policy in the consumer goods company listed on the Indonesia Stock Exchange for the 2016-2020 period.

## SUGGESTION

Based on the conclusions of this study, suggestions can be given, which are as follows:

1. Following existing contributions, practical contributions are aimed at investors and potential investors. So suggestions can be given to investors, and potential investors who want to invest should invest in companies with high profitability and low managerial ownership.
2. By existing contributions, theoretical contributions are aimed at further research. So that the advice that can be given to further research is that further research is expected to re-test the effect of other variables that are thought to affect dividend policies, such as the set of investment opportunities and institutional ownership. In addition, in the results of this study, it can be seen that firm size is unable as a moderation variable on dividend policy, so further research is expected to re-test the moderation variables of firm size in other sector companies registered on the Indonesia Stock Exchange, to determine whether firm size can be used as a moderation variable on the overall dividend policy.
3. Following existing contributions, policy contributions are aimed at company management. So the advice given to company management is for the management of the consumer goods company that wants to improve

shareholders' welfare by distributing dividends. This research is expected to be used as information that can be used in decision-making on dividend distribution, so companies in making decisions both regarding funding and investment must pay attention to internal factors. It is done to meet the executors of investors regarding dividend policies without ignoring the company's goals so that the optimization of the company's goals can be achieved.

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