The Determinants of Dividend Policy in the Consumer Goods Industry Listed on the Indonesia Stock Exchange

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ABSTRACT

The purpose of this research is to understand and conduct empirical research to determine whether profitability variables, company size, liquidity, institutional ownership level, and leverage are determinants of dividend policy in consumer goods companies listed on the Indonesia Stock Exchange. This research is conducted due to issues found in previous research results, which indicated that among the explanatory variables, some have a positive, negative, or even no significant impact on dividend policy. The research population consists of all consumer goods companies, totaling 65 companies listed on the Indonesia Stock Exchange. The sampling technique employed is judgment sampling, with 12 companies selected as the sample. The results of the data analysis conclude that among the five explanatory variables, only two determinant variables significantly affect dividend policy, namely profitability and institutional ownership. Among profitability and institutional ownership variables, it turns out that profitability has a greater impact on dividend policy.

Keywords: *Dividend Policy, Indonesian Capital Market, Indonesian Firms, Consumer Goods Industry*

INTRODUCTION

One of the important financial policies that a company must make is the dividend policy, alongside investment and financing policies. Several theories regarding dividend policy have been developed by corporate finance experts, sometimes conflicting with each other. The earliest dividend policy theory was proposed by Modigliani and Miller (MM) in 1961, stating that dividend policy does not affect the value of a company (dividend irrelevance). In this theory, MM demonstrated the irrelevance of dividend decisions in a world without taxes, transaction costs, and other market imperfections (Berk, et al., 2015).

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Conversely, dividend policy theory was introduced by Gordon and Lintner in 1962, stating that there is a direct relationship between a company's dividend policy and it market value. This theory utilizes the "bird-in-the-hand" argument, suggesting that dividend payments reduce investor uncertainty and cause investors to discount the company's earnings at a lower rate, all else being equal, increasing the company's stock value (Gitman & Zutter, 2012).

Another argument supporting the idea that dividends can affect a company's value is the agency cost theory. Agency costs arise due to the separation between company owners and its managers. Managers may have different interests than the owners, and they may want to retain earnings to expand the company's assets. Larger companies often have more prestige and the potential for greater compensation. Shareholders are aware of the temptations managers face, and they worry that retained earnings might be invested unwisely. By paying relatively large dividends, shareholders hope to mitigate this temptation.

Given the differences in the theories and arguments mentioned above, it is crucial to examine the factors that determine dividend policy in companies. Based on a survey of managers in Indonesian companies, the most important determinants of dividends include earnings stability and the current and expected levels of earnings (Baker & Powell, 2012). Other findings suggest that dividend policy affects a company's value.

Among the various studies on dividend policy, profitability is frequently used as a determinant, although results vary. (Mehta, 2012) concluded that profitability, along with company size, is the most critical consideration for dividend decisions in United Arab Emirates companies. This conclusion aligns with the findings of (Apriliani, 2017), who stated that profitability significantly affects dividend policy.

In contrast, (Ginting, 2019) found that profitability does not significantly affect dividend policy, opposing the two previous studies. Similar results indicating a significant positive impact of profitability on dividend policy were found by (Dewi & Sedana, 2018; Sendow, Nangoi, & Pontoh, 2016). Company size is another factor used as a determinant of dividend policy by many researchers. In addition to (Apriliani, 2017; Mehta, 2012) found that company size is an important factor in determining dividend policy. (Adjaoud & Ben-Amar, 2010; Dewi & Sedana, 2018) reached similar conclusions, stating that company size has a positive impact on dividend policy.

Liquidity, an indicator of a company's business risk, is also believed to influence dividend policy. This has been tested by several researchers. Among them, (Apriliani, 2017; Sendow et al., 2016) that a company's liquidity does not significantly affect dividend policy, while (Dewi & Sedana, 2018) concluded that liquidity has a positive impact on dividend policy. Another study by (Adjaoud & Ben-Amar, 2010) found that firm risk negatively affects dividend policy.

Ownership control, particularly institutional ownership, is another factor believed to determine dividend policy. A study by Cabral et al. (2018) concluded that there is no significant relationship between institutional ownership and dividend policy. In contrast, research by (Abor & Fiador, 2013) suggested a positive influence of institutional ownership on dividend policy in companies in South Africa and Kenya. Leverage (debt) is also considered to have an impact on a company's dividend policy. There are conflicting results from research on this topic. On one hand, studies by (Apriliani, 2017; Sendow et al., 2016) found that leverage does not significantly affect dividend policy. On the other hand, (Ginting, 2019) concluded that leverage has a significant impact on dividend policy.

Due to the inconsistency in previous research results, further empirical testing is necessary, especially for companies operating in Indonesia and listed on the Indonesia Stock Exchange. Among the nine industry sectors listed on the Indonesia Stock Exchange, this study will focus on the Consumer Goods Industry. This sector is relatively under-researched, its issuers produce essential products for society, and many companies in this sector pay dividends.

This study aims to empirically examine whether profitability, company size, liquidity, institutional ownership, and leverage variables are significant determinants of dividend policy in companies in the Consumer Goods Industry listed on the Indonesia Stock Exchange. It is hoped that this research will contribute to the decision-making process of dividend policy for companies in the Consumer Goods Industry, ultimately maximizing their value.

LITERATURE REVIEW
Dividend Policy

As per Horne and Wachowicz's research in 1998, dividend policy was intricately linked to the choices made concerning a company's financial resourcing. The dividend payout ratio played a pivotal role in determining the portion of retained earnings allocated as funding sources. To compute the dividend policy, one had to divide the dividend per share by the earnings per share. Earnings per share, in turn, was calculated by deducting net profits attributable to preference stockholders from the overall net profit and then dividing the result by the total number of outstanding shares (Nuringsih, 2005). It is evident that dividend policy and funding decisions for a company shared an intimate connection. The dividend payout ratio was the parameter that ascertained the proportion of retained profits designated as funding sources. A higher retention of profits corresponded to a reduced allocation for dividend payouts. The allocation of retained profits and the distribution of dividends constituted the two primary facets of dividend policy, as emphasized by Wachowicz in 1997. The measurement of dividend policy involved the utilization of the Dividend Payout Ratio (DPR), expressed in the formula below (Murhadi, 2013):

$$DPR = \frac{Dividend\ Per\ Share}{Earning\ Per\ Share}$$

Institutional Ownership

Institutional Ownership refers to the proportion of ownership held by institutional entities (Beiner et al., 2003). Institutional investors are typically transient owners with a primary focus on current earnings, as noted by Porter (1992). Conversely, an alternative viewpoint characterizes institutional investors as astute participants capable of executing monitoring functions effectively, rendering them less susceptible to manipulation, as asserted. The perspective of astute investors is further corroborated by the research of Shillerdan Pound (1989), who underscored that institutional investors invest substantial time in their analytical endeavors. This substantiates Bushee's 1998 contention that sophisticated investors are less vulnerable to managerial manipulative conduct due to their rigorous monitoring and comprehensive investment analysis. Institutional ownership can be quantified by dividing the number of shares held by institutions by the total outstanding shares, as articulated in the formula below (Imanta and Satwiko, 2011):

$$INST = \frac{Institutional\ Stocks}{Total\ Stocks\ Outstanding}$$

Profitability

The net income of a company (net income after tax), which represents the profit remaining after tax expenses have been deducted, is a critical factor that companies take into consideration when deciding whether to distribute dividends or not. It's important to note, however, that even if a company experiences losses, it does not necessarily mean that it will refrain from paying dividends. If a company does distribute dividends while incurring losses, it results in a negative balance in retained earnings. When a company's profitability improves, it tends to pay larger dividends, and conversely, when profitability is low, dividend payments also tend to decrease. The stability of earnings indicates the company's ability to maintain profits at a predetermined level in line with its objectives, which can only be achieved if other factors remain constant, such as stable sales and the control of production costs and operational expenses. Therefore, it is of paramount importance for a company to enhance its net income for the sake of its ongoing operations and also the attractiveness of its stock price. The magnitude of net income significantly influences the level of dividend payments to shareholders. Furthermore, net income is a factor that elevates a company's stock price, making it more appealing to new investors seeking to invest capital in the company. The measurement of profitability involved the utilization of the Return On Equity (ROE), expressed in the formula below (Hery, 2016):

$$ROE = \frac{Earning\ After\ Tax}{Total\ Equity}$$

Leverage

Debt represents the obligations of a business or company to third parties that are settled by transferring the company's assets or services over a specified period, as agreed upon. These obligations arise as a consequence of past transactions. Utilizing debt as a means of financing is one of the alternatives available to support the capital needs essential for ensuring the success of a company's investment decisions. Debt can also impact the rate of return for equity holders. During challenging times, the rate of return for equity holders decreases due to the utilization of debt, but conversely, it increases under different circumstances. If a company has substantial obligations that need immediate settlement, shareholders may be impacted by postponing or reducing dividend payments. In less favorable solvency conditions, companies typically withhold dividend distributions, prioritizing the use of earnings to improve the company's capital structure. Consequently, the portion of dividend payments to shareholders is reduced as the magnitude of debt obligations increases. This necessitates the allocation of a larger portion of funds to meet debt obligations, thereby diminishing the amount of dividends disbursed to investors. Leverage is measured using a ratio scale and can be proxied as follows (Rehman and Takumi, 2012):

$$DER = \frac{Total\ Debt}{Total\ Equity}$$

Liquidity

Liquidity is the liquidity ratio which represents a company's ability to meet short-term obligations through a certain amount of cash (and cash equivalents, such as checks or other securities) held by the company (Samrotun, 2015). Liquidity, in this context, refers to a company's ability to meet its short-term obligations using a certain amount of cash held by the company. Therefore, the higher the liquidity position of the company, the more likely it is to increase dividend payments to shareholders (Samrotun, 2015). Research conducted by Pramana and Sukartha (2015), Samrotun (2015), and Ritha and Koestiyanto (2013) consistently indicates a positive and significant relationship with dividend policy. In other words, the higher the cash ratio, the stronger the shareholders' confidence in the company's ability to fulfill expected dividend payments. Liquidity can be measured using a ratio scale and the formula as follows (Samrotun, 2015):

$$Cash\ Ratio = \frac{Cash + Cash\ Equivalents}{Short - Term\ Liabilities}$$

Firm Size

Firm size serves as a metric to gauge the magnitude of a company, and it plays a pivotal role in the decision-making process for investors considering investments in a company. This is because the size of the company has an impact on the dividends paid to investors (Samrotun, 2015). Research conducted by Santoso and Prastiwi (2012), Febrianto (2013), Lucyanda and Lilyana (2012) has consistently indicated a positive and significant relationship between company size and dividend policy. Larger companies have easier access to the capital market, which attracts investors to invest in the company, thereby reducing the company's reliance on financing derived from retained earnings. Company size can be measured using a ratio scale and the formula as follows (Samrotun 2015):

$$Firm\ Size = \ Natural\ Logarithm\ of\ Total\ Assets$$

RESEARCH METHOD

The research population consists of 65 Consumer Goods Industry companies listed on the Indonesia Stock Exchange during the period 2015-2020. The research sample was obtained through a two-stage selection process: (1) companies in the Consumer Goods Industry whose stocks were consistently listed on the Indonesia Stock Exchange during the period 2015-2020, and (2) companies in the Consumer Goods Industry that paid dividends for a minimum of 3 out of the 6 years observed. The implementation of the sampling method resulted in a total of 12 companies as the research sample.

The data for this research is cross-sectional data, which includes: (1) dividend payout ratio, (2) return on equity, (3) logarithm of total assets, (4) current ratio, (5) institutional ownership ratio, and (6) debt-to-equity ratio. Data collection in this research utilized a documentation method, meaning that secondary data was obtained from publications by specific institutions. This secondary data was obtained from publications by PT Bursa Efek Indonesia (BEI), documented in the Indonesian Capital Market Director, and on the PT BEI website. This data was then processed and made ready for analysis.

Data analysis began with testing the normality of the data to determine whether the dependent variable, which is dividend policy (DPR), follows a normal distribution. This

was done with the help of a histogram. By observing the histogram generated by the SPSS analysis program, it can be determined whether the histogram approximates a normal distribution. Once it is established that the data follows a normal distribution, regression analysis can be conducted.

Ordinary Least Squares (OLS) regression analysis was used to find the initial regression equation, with the coefficient of determination (adjusted R2). It also involved testing the influence of explanatory variables (profitability, company size, liquidity, institutional ownership level, and leverage) on the dependent variable (dividend policy) through simultaneous impact testing (F-test) and partial impact testing (t-test). The variable with the largest regression coefficient indicates the most significant influence on the dependent variable. After finding the regression equation with a set of explanatory variables affecting it, it is then tested whether the resulting regression meets the assumptions of OLS regression.

The first assumption of OLS regression is that the model should be free from multicollinearity. Multicollinearity occurs when one explanatory variable is correlated with another explanatory variable. The detection of this assumption in a regression model can be seen from the variance inflation factor (VIF) values generated by SPSS. If the VIF value is less than 10, then there is no multicollinearity in the regression model, and vice versa. To address this issue, one of the variables can be removed or the multicollinear variables can be combined into one.

The second assumption of OLS regression is that it should be free from heteroskedasticity. Heteroskedasticity occurs when there is a correlation between explanatory variables and the error term (residual term). This assumption can be detected by observing the data dispersion in a scatterplot that connects the explanatory variables (those significantly affecting the model) with the dependent variable (dividend policy). If the scatterplot shows that data dispersion occurs randomly and does not form a specific pattern, either above or below zero, it means the regression model is free from heteroskedasticity. Otherwise, additional observations can be added to address this issue.

The third assumption of OLS regression is that it should be free from autocorrelation. Autocorrelation occurs when variables in the regression model at time period t are correlated with those variables at previous time periods (t-1, t-2, and so on). This assumption can be tested using the Durbin-Watson (DW) statistical tool. The DW value needs to be calculated, and then, with a specific criterion, it can be determined whether autocorrelation is present, inconclusive, or not. If autocorrelation is detected, it can be addressed by transforming the variable using the ρ (rho) estimation method.

RESULT AND DISCUSSION

This research is a causality study, meaning it aims to examine the relationship between explanatory variables and dividend policy, and the conclusions drawn from this research represent generalizations about its population characteristics. Data for this research were collected from 2015 – 2020, with sample companies selected for further analysis being those that paid dividends for a minimum of 3 years. Specifically, in 2020, it turned out that only 1 company paid dividends. Overall, the number of Consumer Goods Industry companies whose stocks were listed on the Indonesia Stock Exchange during the period 2015 – 2020 and met the criteria for being included in the sample can be seen in

Table 1.

Table 1. The Number of Companies Listed and Distributing Dividends in the Consumer Goods Industry for the Period 2015-2020.

Year	Number of Registered Companies	Number of Companies Recording Profits	Number of Companies Distributing Dividends
2015	38	16	7
2016	38	20	11
2017	42	22	12
2018	46	22	12
2019	51	24	11
2020	65	26	1

Source: Annual financial reports of companies that distribute dividends to the consumer goods industry on the IDX for the 2015-2020 period

Based on the data in Table 1, it can be seen that in terms of the number of companies listed and profitable companies in the Consumer Goods Industry whose stocks are listed on the Indonesia Stock Exchange (BEI), there has been a general increase over the past 6 years. In 2015 and 2016, the number of listed companies remained unchanged, but starting from 2017 to 2020, there was a significant increase in the number of listed companies. In fact, in 2020, the number of Consumer Goods Industry companies listed on the BEI increased by 14 companies, or a 27.45% increase. Over the past 5 years, the number of companies in this sector has increased on average by 11.67% annually.

In terms of the number of companies reporting profits, it has increased over the past 5 years, except for 2018. The increase in the number of profitable companies occurred in 2016, from 16 companies to 20 companies, representing a 25% increase. On average, the number of companies reporting profits over the past 5 years reached 10.48% per year. This is actually quite reasonable, considering that during the same period, the number of listed companies also increased by 11.67%.

Referring to the data in Table 1, it can also be observed that not all companies reporting profits distribute dividends. Over the past 6 years, the percentage of companies distributing dividends was 42.92% of the total number of profitable companies. The highest percentage of companies reporting profits and distributing dividends occurred in 2016, at 55%, which means that more than 50% of the profitable companies distributed dividends.

The lowest number of companies distributing dividends occurred in 2020. Out of the 26 companies reporting profits, only 1 company distributed dividends, namely PT Buyung Poetra Sembada Tbk. This happened as a financial precaution due to the increasing financial uncertainty in facing operations in 2021. With only 1 company distributing dividends, the percentage of dividend-paying companies to profitable companies was the lowest, at only 3.85%.

Based on the two criteria used in the research sample selection, it turns out that there were 12 companies that met the criteria, and their dividend policies were analyzed. Among these sample companies, there was variation in dividend payments over the past 5 years, with some distributing dividends for 3, 4, and 5 years. Table 2 shows the names of the companies and the number of years each company distributed dividends in the last 5 years.

Table 2. Sample Company Names and Number of Years Observed

No.	Company Name	Number of Years of Observation
1	PT Budi Starch & Sweetener, Tbk.	4
2	PT Campina Ice Cream Industy, Tbk.	3
3	PT Delta Djakarta, Tbk.	5
4	PT Garudafood Putra Putri Jaya, Tbk.	4
5	PT Buyung Poetra Sembada, Tbk.	4
6	PT Indofood CBP Sukses Makmur, Tbk.	5
7	PT Indofood Sukses Makmur, Tbk.	5
8	PT Multi Bintang Indonesia, Tbk.	5
9	PT Mayora Indah, Tbk.	5
10	PT Nippon Indosari Corpindo, Tbk.	5
11	PT Sekar Laut, Tbk.	5
12	PT Ultra jaya Industry & Trading Company, Tbk.	4
	Total	54

Source: Annual financial reports on the IDX for the 2015-2020 period

Based on the data in Table 2, the number of data points to be analyzed to produce a general regression equation model is 54 observations. In this study, the dividend payout ratio, as an indicator of dividend policy, is treated as the dependent variable, while the independent variables include return on equity (ROE), company size in logarithmic form (Log-TA), current ratio (CR), institutional ownership ratio (INST), and debt-to-equity ratio (DER).

With the collected data, it can be observed that financial data varies among companies, especially when considering the dividend payout ratio (DPR) as the dependent variable. Ideally, with a sample of 12 companies and a observation period of 6 years, there should be a total of 72 observations. However, only 54 observations were obtained because not every company reported profits, and not every year did all 12 companies distribute dividends. In fact, in 2020, only 1 company distributed dividends.

The collected data was then analyzed through the following steps: (1) observing the data to ensure there are no extreme values; (2) removing extreme data points if any are present; (3) conducting data testing, specifically the normality test; (4) analyzing the data using SPSS; (5) obtaining the initial regression equation; (6) evaluating the obtained regression model to check if it meets the assumptions of OLS regression; and (7) determining the final regression model as the research outcome.

After going through these 7 steps, it was found that there were no extreme data points. Therefore, all collected data were considered reasonable, and no data points were excluded from the sample for analysis. The next step was to conduct a normality test on the data to determine whether the entire dataset follows a normal distribution. The normality test was performed using a histogram of the dependent variable (dividend policy) that would be used in the regression model later on. The results of the normality test using the SPSS program are shown in Figure 1.

Based on Figure 1, it can be observed that the histogram pattern indicates that the frequency distribution of the dependent variable (dividend policy) used in the regression model closely approximates a normal distribution. The results of this data test conclude that the data in the study is ready to be analyzed using the ordinary least squares (OLS) regression model. The initial regression equation obtained from the OLS regression

analysis with SPSS is as follows:

$$Y = -0.995 + 0.528ROE + 0.076LOG\ TA + 0.016CR + 0.004INST + 0.016DER.$$
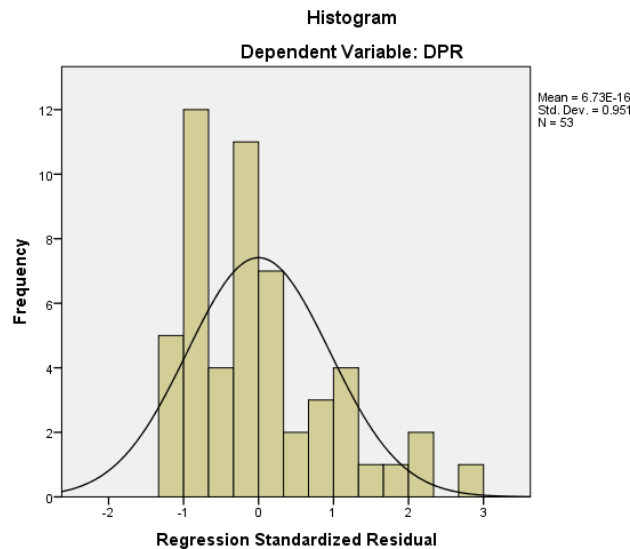
Source: Processed research, 2023
Figure 1. Dependent Variable Normality Test Results

Based on the regression equation model obtained, several interpretations can be drawn. First, if the variables return on equity (ROE), company size (LOG-TA), current ratio (CR), institutional ownership ratio (INST), and long-term debt-to-equity ratio (DER) are all equal to zero, then the dividend payout ratio (DPR) will be -0.995. Second, assuming all other independent variables in the regression model are zero, if ROE changes by 1%, then DPR will change by 0.528%. This implies that there is a tendency for companies to increase dividend payments as profitability increases.

Third, if all other independent variables except for company size are assumed to be zero, if the logarithm of total assets (Log-TA) changes by Rp1.00, then the dividend payout ratio will change by 0.076. Fourth, if all other independent variables except for the current ratio are assumed to be zero, if the current ratio changes by 1%, then the dividend payout ratio will change by 0.016%.

Fifth, if all other independent variables except for institutional ownership ratio are assumed to be zero, if the institutional ownership ratio changes by 1%, then the dividend payout ratio will change by 0.004%. Sixth, if all other independent variables except for the leverage ratio (long-term debt-to-equity ratio) are assumed to be zero, then if the leverage ratio changes by 1%, the dividend payout ratio will change by 0.016%.

From the regression analysis results using the SPSS application, a coefficient of determination (R^2) of 0.376 or 37.60% and an adjusted R^2 of 0.310 or 31.00% were obtained. The coefficient of determination used in this analysis is the adjusted R^2. With an adjusted R^2 of 31.00%, it indicates that changes in the dividend payout ratio (DPR) can be explained by changes in profitability (ROE), company size (Log-TA), liquidity (CR), institutional ownership level (INST), and leverage ratio (DER) by 31.00%. The remaining 69.00% of changes are explained by other independent variables outside this regression model.

With the regression equation generated, if it is tested whether the explanatory

variables (independent variables) influence dividend policy, it can be done using the F-test and t-test. In the functional test (F-test), the analysis results from SPSS yielded an F-value of 5.671. With a significance level less than 0.05 or 5.00%, and a significance level of 0.000, it means rejecting the null hypothesis (H0) and accepting the alternative hypothesis (H1). This means that functionally, out of the 5 independent variables, at least 1 variable significantly affects dividend policy.

In the partial test using the t-test, it can be done in two ways: comparing the t-value with the t-table or comparing the significance level (sig) with α (alpha). If the criterion used is to compare sig with α at a significance level of 0.10 or 10.00%, then an independent variable is considered to have a significant effect on dividend policy if sig < 0.10. The results of the partial test are shown in Table 3. Based on the data in this table, only 2 independent variables have sig values less than 10.00%, which are ROE and INST.

Based on the results of this regression analysis, among the independent variables ROE, Log TA, CR, INST, and DER, the one that has the most significant impact on dividend policy is the ROE variable. It can be seen that among the variables ROE and INST, which significantly affect DER, the ROE variable has a regression coefficient of 0.528, which is larger than INST, which has a regression coefficient of 0.004. Similarly, when looking at the sig values, the ROE variable has a larger value than INST.

Table 3. Results of Partial Analysis of the Influence of ROE, Log-TA, CR, INST, and DER on DER

| No.	Variable Name	t-value	Sig	Conclusion
1	ROE	3,965	0,000	Significant
2	Log-TA	1,507	0,139	Not significant
3	CR	1,458	0,152	Not significant
4	INST	1,846	0,071	Significant
5	DER	0,192	0,848	Not significant

Source: Processed research, 2023

With the results of testing the influence of independent variables on the dependent variable, which is dividend policy (indicated by DER), it turns out that only two independent variables have an influence, namely profitability (ROE) and institutional investor ownership level (INST). With this regression equation, it is necessary to test whether it meets the assumptions of the ordinary least squares (OLS) regression model, namely being free from multicollinearity, heteroskedasticity, and autocorrelation or not.

In the regression analysis results with SPSS to test whether the regression meets the multicollinearity condition or not, the magnitude of the variance inflation factor (VIF) values can be used. If the VIF value of an independent variable is less than (<) 10, then there is no multicollinearity between the two independent variables. With a VIF of 1.306, the ROE variable in the regression model above is free from multicollinearity with the other independent variables. Similarly, for the INST variable, with a VIF of 1.456, it does not exhibit multicollinearity with other independent variables.

The second assumption test for the OLS regression model is the heteroskedasticity test. The test for the presence of heteroskedasticity in the regression model is done by examining the data spread in scatterplots that connect the independent variables (ROE and INST) with their dependent variable (DPR), as shown in Figures 2 and 3. In Figures 2 and 3, the independent variables ROE and INST are represented on the horizontal axis,

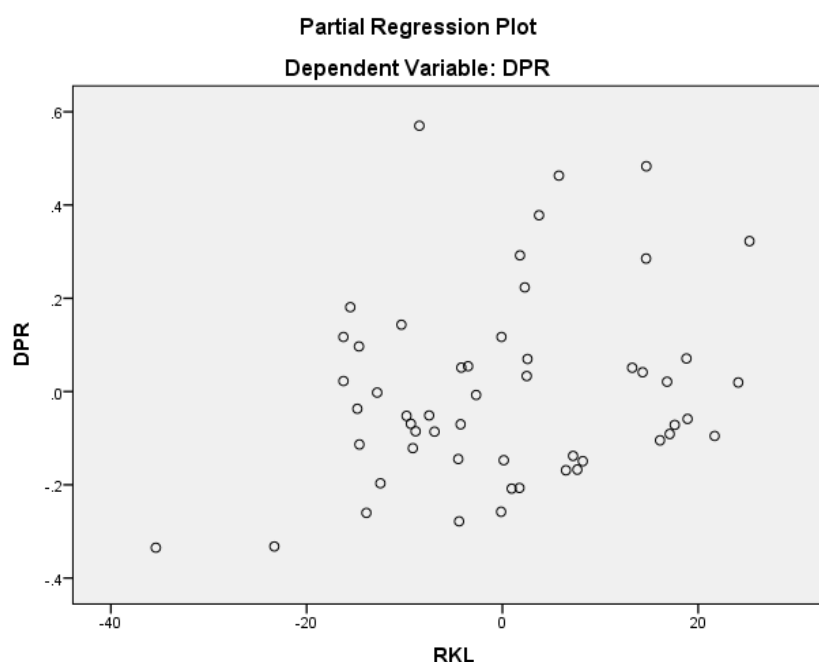while the dependent variable (DPR) is represented on the vertical axis.
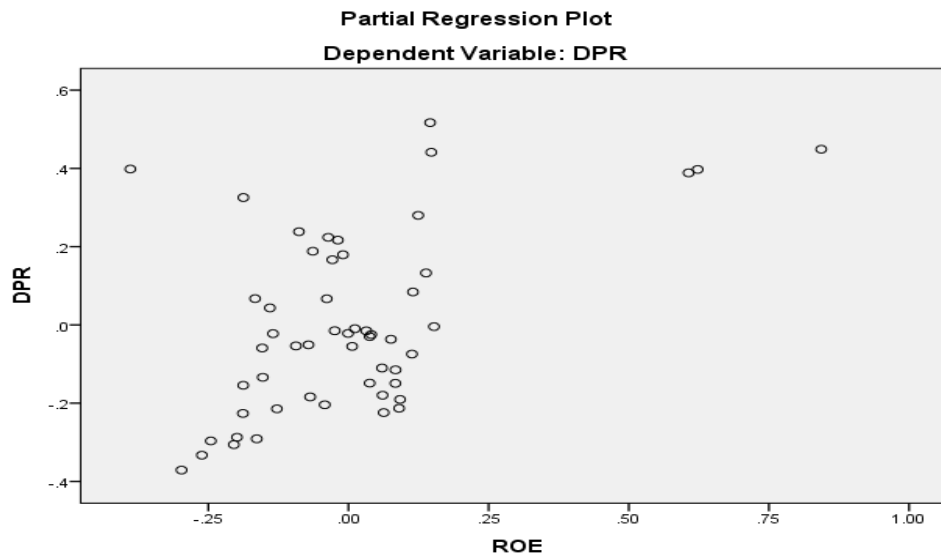
Source: Processed research, 2023

Figure 2. Testing the Heteroskedasticity Assumption of the Independent Variable ROE with Scatterplot

From Figure 2, it can be seen that the relationship between the ROE data and DPR is randomly dispersed and does not form a specific pattern. Similarly, the relationship between INST and DPR also shows that the data is randomly scattered and does not form a specific pattern. In the scatterplot, points are scattered both above and below zero on the vertical axis (DPR). By examining the data patterns in Figures 2 and 3, it can be concluded that the equation in the generated regression model is free from heteroskedasticity.

The last test for the OLS regression model is the autocorrelation test. This test is used to determine whether there is a relationship between a specific independent variable at a certain time and the previous period. The test is conducted using the Durbin-Watson (DW) statistical tool with evaluation methods as shown in Table 4. By using the SPSS program, the Durbin-Watson calculation results can be obtained, while DL and DU can be seen in the Durbin-Watson Table d Statistic.

Source: Processed research, 2023

Figure 3. Testing the Heteroskedasticity Assumption of the Independent Variable INST with Scatterplot

Table 4. Assessment of Autocorrelation Assumption Test with Durbin-Watson Model

No.	Testing Region	Conclusion
1	$d < d_L$	Positive Autocorrelation
2	$d_L < d < d_U$	Uncertain
3	$d_U < d < 4 - d_U$	No Autocorrelation
4	$4 - d_U < d < 4 - d_L$	Uncertain
5	$4 - d_L < d$	Negative Autocorrelation

Based on the List in the Durbin-Watson Table d Statistic, with a number of explanatory variables (k') of 2 and a number of observations (n) of 54, dL is obtained at 1.490 and dU at 1.641. With the initial SPSS analysis result, the d output is 0.622, or d < dL, which means there is positive autocorrelation in the generated regression. Therefore, corrective action is needed to ensure that the OLS regression model does not exhibit autocorrelation.

The corrective action to address autocorrelation is carried out through variable transformation using the ρ (rho) estimation method, based on the Durbin-Watson statistic. After processing the data with three autocorrelation transformations, the Durbin-Watson statistic is calculated to be 1.722. According to the assessment in item number 3 in Table 4, this result indicates: 1.641 < 1.722 < 2.359. Thus, the resulting regression model is free from autocorrelation.

Through the testing of assumptions and the improvement of the ordinary least square (OLS) regression model, which includes multicollinearity, heteroskedasticity, and autocorrelation, a regression model has been obtained that meets these assumptions, with

the equation as follows:

$$DPR = -0.995 + 0.528\ ROE + 0.004\ INST + \varepsilon.$$

The adjusted coefficient of determination (adjusted R^2) of this regression model is 31.00%, which means that 31.00% of the changes in DPR (dividend policy) are explained by changes in the variables ROE (profitability) and INST (institutional ownership level), while the remaining 69.00% is explained by other independent variables outside the regression model generated by this study.

CONCLUSION

The final result of the regression analysis shows that out of the 5 independent variables, only 2 independent variables significantly influence dividend policy, namely profitability and institutional investor ownership level. With these results, it means that the hypothesis stating that the 2 independent variables, including profitability and institutional investor ownership level, have a significant impact on dividend policy is accepted.

The other three independent variables, namely company size, liquidity, and debt ratio, do not significantly affect dividend policy. With these results, the hypothesis stating that the variables of company size, liquidity, and debt ratio significantly influence dividend policy is rejected. This outcome raises the need for further discussion and an examination of its consistency with the conclusions of previous research.

Profitability significantly and positively influences dividend policy, implying that if a company's profitability is high, there is a tendency for the dividend payment to be relatively high as well. This analysis result indicates that company management strives to accommodate the desires of investors to pay relatively large dividends when the profits earned in a particular period are substantial.

With these relatively large dividend payments, shareholders of the company feel more certain about the returns on their investments in Consumer Goods Industry stocks and tend to avoid higher risks. Thus, investors in the Consumer Goods Industry tend to behave in accordance with the relevant dividend theory, namely the bird-in-hand theory. Dividend receipt by investors is considered more certain than the returns to be obtained in the future as a result of reinvesting some retained earnings.

The conclusion of this research is consistent with previous research findings, which state that profitability is an important variable in dividend decisions. This result was found by Baker and Powell (2012), Mehta (2012), and Apriliani and Natalylova (2017). Other research conclusions that are also consistent with this result show that profitability significantly and positively influences dividend policy, as found by Sendow et al. (2017) and Dewi and Sedora (2018). This research's conclusion is inconsistent with previous research by Ginting and Munawaroh (2018), which showed that profitability does not significantly influence dividend policy.

The research result concludes that company size significantly does not affect dividend policy. This indicates that the size of the company is not a determining factor in whether the company will pay relatively large or small dividends. Generally, the larger the size of a company, the higher the stability of its earnings. Therefore, the company's size is not used as a benchmark to determine the size of dividends to be paid to shareholders. This research result is not relevant and inconsistent with the conclusions of Mehta (2012) and Apriliani and Natalylova (2017), which found that company size is an

important factor in making dividend policy decisions. Contrary research findings were conducted by Dewi and Sedora (2017) and Adjaout and Ben-Amar (2010), which concluded that company size significantly and positively affects dividend policy.

The research's regression analysis results state that liquidity does not significantly affect dividend policy. This indicates that companies in the Consumer Goods Industry do not consider the liquidity aspect of the company when making dividend decisions. It is possible that if companies face liquidity problems, they do not necessarily rely on retained earnings to address these liquidity issues. This research result is consistent with the findings of Apriliani and Natalylova (2017) but contrary to the findings of Dewi and Sedora (2018).

The next research finding is that institutional investor ownership level significantly and positively affects dividend policy, even with a confidence level of approximately 93.00%. This result indicates that institutional shareholders play a decisive role and are highly regarded by company management in making dividend policy decisions. The higher the level of institutional shareholder ownership, the larger the dividends that the issuing company will pay. This research conclusion is consistent with the research findings of Cabral et al. (2018) but contrary to the conclusions of Abor and Fiador (2013).

The final research result in this study states that leverage or debt does not significantly affect dividend policy. The research conclusion suggests that the size of debt significantly does not influence dividend decisions. This result indicates that the company does not consider financial risk in making dividend decisions. This is likely because the operational risks faced by Consumer Goods Industry companies are more considered in making dividend decisions. This research result is consistent with the findings of Apriliani and Natalylova (2017) and Sendow et al. (2017) but contrary to the findings of Ginting and Munawaroh (2018).

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