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The effect of profitability, financial leverage and growth opportunities on dividend policy with firm size as moderation

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Abstract. The purpose of this research is to determine the effect of profitability, financial leverage, and growth opportunities on dividend policy with firm size as a moderator. The methodology of this research is panel data regression. The sampling technique used is purposive sampling. The sample used consists of companies engaged in the manufacturing sector listed on the LQ45 Index of the Indonesia Stock Exchange from 2019 to 2023. The conclusion of this research is that profitability has a significant impact on dividend policy, while financial leverage and growth opportunities do not have a significant impact on dividend policy. This is because larger companies will have greater profits, which will impact the payment of dividends to shareholders. The second conclusion is that firm size moderates the influence of profitability on dividend policy, while financial leverage and growth opportunities are not significant to dividend policy.

Keywords. profitability, financial leverage, growth opportunities, dividend policy, firm size

1. Background

The capital market is a means of funding for companies and the government, as well as an investment vehicle for fund owners (investors). In Indonesia, the capital market has become one of the means for people to store their funds besides banks. The Indonesia Stock Exchange is an organized stock exchange with trading activities such as stocks that use the services of brokers, commissioners and underwriters. IDX first launched the LQ45 Index in February 1977, companies included in LQ45 are those that have been selected based on criteria such as high liquidity, market capitalization, company fundamentals, growth prospects, and several other criteria determined by the Indonesia Stock Exchange (IDX). One of the companies included is a manufacturing company, which is an processing industry company that processes raw materials into semi-finished or finished goods. Manufacturing is an industry that applies machines, equipment and labor that converts raw materials into finished goods for sale, usually mass-produced for customers to make a profit.

Investors invest with the aim of obtaining maximum profit sharing from the company, which is usually called dividends or capital gains. For companies, funds from investors can be used as capital for company operations. A company's dividend policy is an indicator used by investors to determine which companies to invest in. Investors can analyze a company's dividend policy from financial ratios. Financial ratios can show the company's financial health

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condition and be able to see whether the company's performance is in good or bad performance (Allozi and Obeidat, 2016).

Investors expect stable dividends every year or an increase in terms of dividend payments, but on the other hand companies are faced with various considerations such as the need for more profitable re-investment, increasing company funding needs and maintaining the liquidity level of the company.

Dividends are one of the components that investors pay attention to who expect profits from dividends distributed by companies and capital gains. In the long term, investors are more interested in dividend certainty compared to capital gains (Asadi and Oladi, 2015).

Several factors that can influence dividend policy include Profitability. According to Moeljadi and Supriyati (2014) in Agustina (2017) profitability is the company's ability to generate net income sourced from activities carried out in the accounting period. Profitability is the company's ability to manage its resources to generate profits for shareholders. Profitability is an evaluation for companies of the value of the company they own. If the company has good management, automatically the company can generate maximum profits. Greater profitability will distribute greater dividends, this is supported by research conducted by Nadiem, bashir and usman (2018) which states that the level of company profitability has a positive and significant effect on dividend policy.

Another factor that can influence dividend policy is financial leverage. By calculating financial leverage, it can show how companies have fixed income to be used in their capital structure. The leverage ratio will show the proportion of debt use to finance its investments. The use of debt is said to be profitable if the income from investment is greater than the fixed expenses that must be borne by the company (Seno & Handrijaningsih, 2009).

For companies and investors, they hope that the company can always develop into a bigger one. The opportunity for a company to develop is shown by the company's growth opportunities, where the greater the growth opportunities, the greater the company can develop. If this happens, it will have an impact on the amount of funds needed to develop the company, so the funds needed to develop the company will be even greater so that the company retains the profits it gets and reduces the level of dividends given to investors (Pribadi and Sampurno, 2012). Research on growth opportunities conducted by bashir and usman (2018) which states that growth opportunities have a negative effect on a company's dividend policy.

2. Literature Review

2.1. Dividends

Dividends are the amount of income distributed to company shareholders. Dividends can be in cash or stock. Stock dividends are not very popular or controversial and dividend policy decisions are often problematic with cash dividends (Khalid and Rehman, 2015). Dividend decisions are very important because dividends are allocations of cash flows set aside for shareholders, while retained earnings are one of the most important sources of funds to finance company growth (Horne and Wachowicz, 2008).

a) Dividend policy

Dividend policy is the distribution of profits earned by the company to shareholders in the form of cash dividends or retaining these profits to be reinvested as retained earnings (Gitman and Zutter, 2015). Dividend policy is a decision from the board of directors regarding the amount of remaining profits (past or present) that can be distributed to shareholders in a company approved at a general meeting of shareholders (GMS). For investors, dividends are the rate of return on investment in a company. Dividend policy is said to be optimal for a

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company when the policy creates a balance between current dividends and future growth to be able to maximize the company's stock price (Brigham and Houston, 2012). Companies that pay large dividends are able to motivate investors to buy company shares. Companies that have the ability to pay dividends are assumed by the public to be profitable companies.

b) Dividend Policy Theories

- Bird-in-the-Hand Theory

According to Brigham and Houston (2012), this theory can be explained by using the understanding that investors actually value expected income from dividends much more than expected income from capital gains because the dividend yield component has a lower risk than the capital gain component.

- Tax Preference Theory

This theory states that investors or shareholders prefer companies that distribute lower dividends because if the dividends paid are high, the tax burden that must be borne by investors or shareholders on dividend distribution will also be high (Baker et al, 2007).

- Signaling Theory

Khalid and Rehman (2015) explain that this theory states that dividends reduce information asymmetry between management and shareholders by conveying information about the company's future prospects.

- Agency Theory

Agency theory is a theory that explains the relationship between principals and agents (Agustina, 2017). In carrying out the process of achieving high company value, there will certainly be a conflict regarding interests between company managers and shareholders. One of the causes of this agency conflict is because the agent does not carry out tasks as they should in accordance with the wishes of the principal party. As a result, a conflict of interest arises. Shareholders want a greater and faster return on their investment while managers want their interests to be accommodated by providing compensation or incentives as much as possible for their performance in running the company.

- Life-cycle theory

The life cycle theory of dividends is based on the idea that as a company matures, its ability to generate money exceeds its ability to find profitable investment opportunities. Eventually, it becomes optimal for the company to distribute free cash flow to shareholders in the form of dividends (Bulan et al., 2006).

c) Forms of Dividends

Brigham and Houston (2012) explain that shareholders will receive dividends as rewards for their investment in the company. Shareholders can receive dividends in several types, including:

- Cash dividends are dividends paid in cash, generally distributed periodically taken from the company's profits after tax.
- Stock dividends are dividend payments given to shareholders in the form of shares. Stock dividends are generally used routinely every year to maintain and limit increases or decreases in stock prices. Stock dividends are nothing more than a restructuring of the company's capital, while the proportion of ownership does not change. The purpose of the company giving stock dividends is to save cash because there are more profitable investment opportunities, but this can disappoint shareholders, there will be investment opportunities in the future.

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2.2 Profitability

According to Gitman and Zutter (2015) profitability is the company's ability to earn profits in relation to sales, total assets and own capital. Profitability is the company's ability to generate profits to measure the level of effectiveness and efficiency, as well as the use of assets in the company's operations. Profitability is a measure that can be used to see the effectiveness of management of activities carried out by the company or see the efforts made by the company to obtain profits by utilizing its operations productively (Wiagustini, 2010) in (Soge, et al; 2020).

In this study, profitability is measured using Return on Equity in line with research by Jaara et al (2018) which explains the positive effect of ROE on dividend policy. The greater the ROE, the greater the dividend payout ratio. This is because dividends are a distribution of profits earned by the company, so the greater the company's ability to generate profits, the greater the dividends that will be distributed by the company to shareholders.

2.3 Financial Leverage

According to Brigham and Houston (2011), financial leverage is a measure that shows the extent to which companies have fixed income used in the company's capital structure. In general, there are two types of leverage, namely operating leverage and financial leverage. Financial leverage shows the proportion of debt use to finance its investments. The leverage ratio is the proportion of total debt to shareholder equity. The leverage ratio is used to provide an overview of the capital structure owned by the company, so that the risk of uncollectible debt can be seen (Luciana and Ikka, 2007). Leverage ratio, this ratio is used to measure how far the company's assets are financed by debt or financed by external parties.

2.4 Growth Opportunities

According to Bintara (2018) Growth opportunity is a company that has the opportunity or opportunity to grow or achieve a growth rate or develop its company. With a high growth opportunity value, the company is able to achieve and generate high profits in the future. According to Asmanto and Andayani (2020:2) growth opportunity is another factor that can affect the value of a company, companies that have good growth will demand good company management quality so that it will affect the overall company performance. Investors will be more interested in large companies compared to small companies, because large companies tend to be more daring to issue new shares aimed at meeting the operational needs of the company followed by an increase in market share.

3. Method

This research is a causal hypothesis testing where this research was conducted to determine the effect of profitability, Financial Leverage and growth opportunities on dividend policy. The type of data used is panel data, which is a combination of cross sectional and time series data on manufacturing companies for the 2019-2023 period. The data used in this study is secondary data. Secondary data is a source of research data obtained by researchers indirectly through intermediary media (obtained and recorded by other parties) or data that has been processed such as research literature results, research documentation results, and reports related to this research that have been published. The sample used in this study is as follows:

No	Kode	Nama Emiten
1	CPIN	Charoen Pokphand Indonesia Tbk
2	GGRM	Gudang Garam Tbk.

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3	HMSP	H.M. Sampoerna Tbk.
4	ICBP	Indofood CBP Sukses Makmur Tbk.
5	INDF	Indofood Sukses Makmur Tbk.
6	INKP	Indah Kiat Pulp & Paper Tbk.
7	INTP	Indocement Tunggal Prakarsa Tbk.
8	KLBF	Kalbe Farma Tbk.
9	SMGR	Semen Indonesia (Persero) Tbk.
10	TKIM	Pabrik Kertas Tjiwi Kimia Tbk.
11	UNVR	Unilever Indonesia Tbk.

Source: www.idx.co.id

3.1 Variable

The dependent variable in this study is dividend policy. Dividend policy in this study is measured using the dividend payout ratio.

NO	Variable	Formula
1	Dividend Payout Ratio	$DPR = \frac{Total\ dividends}{Net\ Earnings}$
2	Profitability *Return on Equity*	$ROE = \frac{Net\ Income}{Total\ Equity}$
3	*Financial Leverage* Debt to Asset Ratio (DAR)	$DAR = \frac{Total\ Debt}{Total\ Assets}$
4	*Growth opportunities* Market to book value (MTB)	$MTB = \frac{\text{Book value per share}}{\text{Market value per share}}$
5	Firm Size	$Firm\ Size = Ln(Total\ Aset)$

3.2 Data Analysis Method

The analytical method used in this study is linear regression with panel data, which aims to test and analyze the effect of profitability, Financial Leverage and growth opportunities on dividend policy in manufacturing companies listed on the Indonesia Stock Exchange (IDX).

3.2.1 Model Selection Test

There are three methods that can be used in panel data regression, namely the Common Effect (Panel Least Square) model, the Fixed Effect model and the Random Effect model. To determine the appropriate and good model to be interpreted, it is necessary to carry out three stages of testing, namely the Chow Test, the Hausman Test and the Lagrange Multiplier Test.

Model the Chow test is used to choose the Common Effect or Fixed Effect method, then use the Hausman test to choose the Fixed effect or Random effect model. The steps for testing panel data are as follows:

a) The Chow test is to see which model is more appropriate to use between the Common Effect model and the Fixed Effect.Decision making criteria:

- If prob F < 0.05 then H0 is rejected, meaning that the Fixed Effect model is more appropriate than the Common Effect model.

- If prob F > 0.05 then H0 fails to be rejected, meaning that the Common Effect model is more appropriate than the Fixed Effect model

b) The Hausman test is to see which model is more appropriate to use between the Fixed Effect model or the Random Effect model. Decision making criteria:

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- If the prob Cross Section Random < 0.05 then H0 is rejected, meaning that Fixed Effect is more appropriate than the Random Effect model.
- If the prob Cross Section Random > 0.05 then H0 fails to be rejected, meaning that Random Effect is more appropriate than the Fixed Effect model.

c) The Lagrange Multiplier (LM) test is to see which model is more appropriate to use between the Common Effect model or the Random Effect model. This test is carried out if the first stage produces a common effects model that is better than the fixed effect model. If fixed effects are better, then the LM test is not necessary. Decision making criteria:

- If $\alpha < 0.05$ then H0 is rejected, meaning that Fixed Effect is more appropriate than the Random Effect model.
- If $\alpha > 0.05$ then H0 fails to be rejected, meaning that Random Effect is more appropriate than the Fixed Effect model.

3.2.2 Classical Assumption Test

- Heteroscedasticity Test

The heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residuals of one observation to another. A good regression model is homoscedasticity and does not occur heteroscedasticity.

- Multicollinearity Test

The Multicollinearity Test aims to test whether the regression model found a correlation between independent variables. A good regression model should not have a correlation between independent variables. Testing is done by correlating each independent variable.

3.2.3 Hypothesis Test

a) F Test

The F-Test is used to determine whether the model based on the multiple regression equation is suitable for use or not. The basis for the decision of the F-Test is by comparing the significance value (alpha) of 0.05. The decision criteria are as follows:

- If the p-value < 0.10, it means that at least one independent variable used has a significant partial effect, thus the regression model is appropriate.
- If the p-value > 0.10, it means that none of the independent variables used has a significant partial effect, thus the regression model is not appropriate.

b) Adjusted R2

The testing of all independent variables to see if the existing independent variables can explain the changes in the dependent variable. If the Adj.R2 value approaches one, it means the independent variables can explain the changes in the dependent variable well. If the Adj.R2 value approaches zero, it means the independent variables cannot adequately explain the changes in the dependent variable.

c) T-Test

The t-Test is conducted to test whether the independent variables have a significant effect on the dependent variable, assuming that other variables are constant. Here are the hypotheses of the t-Test:

Ho: The independent variables do not have a significant partial effect on the dependent variable.

Ha: The independent variables have a significant partial effect on the dependent variable.

The decision criteria are as follows:

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- If the p value > 0.10, then Ho is accepted, meaning the independent variables do not significantly affect the dependent variable.
- If the p value < 0.10, then Ho is rejected, meaning the independent variables significantly affect the dependent variable.

4. Result and Discussion

4.1 Descriptive Statistics

	ROE	DAR	MTB	DPR
Mean	3.244933	8.53880	4.148800	2.620000
Median	1.350000	9.820000	7.240000	0.510000
Maximum	105.7000	52.79000	10.26000	2.140000
Minimum	-60.21000	0.150000	0.280000	0.110000
Std. Dev.	14.02247	7.548643	4.757502	1.421548
Skewness	3.552535	2.077869	2.042446	1.022213
Kurtosis	33.01954	9.216453	6.899518	4.035158
Jarque-Bera	2973.921	174.7327	89.66435	16.41009
Probability	0.000000	0.000000	0.000000	0.000273
Sum	352.1700	790.4100	236.1600	46.50000
Sum Sq. Dev.	44062.57	4126.669	462.6826	13.15000
Observations	54	54	54	54

- The minimum ROE value is -60.210 and the maximum value is 105.700, with an average value of 3.244 and a median value of 1.350 at a standard deviation of 14.022. The company with the smallest business risk value is PT Kalbe Farma Tbk. and the largest is PT Indah Kiat Pulp & Paper Tbk.
- The minimum DAR value is 0.150 and the maximum value is 52.790, with an average mean value of 8.538 and a median value of 9.820 at a standard deviation of 6.548. The company with the smallest profitability value is PT Indofood Sukses Makmur Tbk. and the largest is PT Unilever Indonesia Tbk.
- The minimum MTB value is 0.280 and the maximum value is 10.260, with an average value of 4.148 and a median value of 7.240 at a standard deviation of 4.757. The company with the smallest Liquidity value is PT Indocement Tunggal Prakarsa Tbk. and the largest is PT Semen Indonesia (Persero) Tbk.
- The minimum DPR value is 0.110 and the maximum value is 2.140, with an average value of 2.620 and a median value of 0.510 at a standard deviation of 1.421. The company with the smallest company size value is PT H.M. Sampoerna Tbk. and the largest is PT Mayora Indah Tbk. Gudang Garam Tbk.

4.2 Panel Data Regression Model Selection Test

a) Chow Test Result

Redundant Fixed Effects Tests
Equation: FEM
Test period fixed effects

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Effects Test	Statistic	d.f.	Prob.
Period F	0.797487	(4,43)	0.5335
Period Chi-square	3.864353	4	0.4247

Based on the Chow test results, it can be seen that the probability value of the cross-section F is 0.000 and the cross-section chi-square is 0.0000 < 0.05, so it can be concluded that the common effect model (CEM) is better to use than the fixed effect model (FEM).

b) Hausman Test Results

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

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	14.673846	6	0.0230

The prob value. Cross-section random is 0.0230 where this value is smaller than the significance level of 0.05 so that the appropriate estimation model is the fixed effect model (FEM) compared to the Random Effect Model (REM).

c) Lagrange Multiplier 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	24.05986 (0.0000)	0.448846 (0.5029)	24.50871 (0.0000)
Honda	4.905085 (0.0000)	-0.669960 --	2.994686 (0.0014)
King-Wu	4.905085 (0.0000)	-0.669960 --	2.055659 (0.0199)
Standardized Honda	6.347514 (0.0000)	-0.445614 --	0.728310 (0.2332)
Standardized King-Wu	6.347514 (0.0000)	-0.445614 --	-0.201665 --
Gourierioux, et al.*	--	--	24.05986 (< 0.01)

*Mixed chi-square asymptotic critical values:

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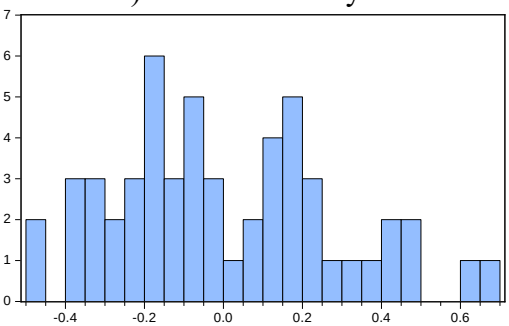
1%	7.289
5%	4.321
10%	2.952

The prob value. Cross-section random is 0.000 where this value is smaller than the significance level of 0.05 so that the appropriate estimation model is the Random Effect Model (REM) compared to the fixed effect model (FEM).

4.3 Classical Assumption Test

a) Normality Test



Series: Standardized Residuals
Sample 2019 2023
Observations 54

Mean	6.03e-15
Median	-0.045284
Maximum	0.651368
Minimum	-0.471654
Std. Dev.	0.277865
Skewness	0.427711
Kurtosis	2.527680
Jarque-Bera	2.148378
Probability	0.341575

Based on the normality test results in the figure above, it shows that the probability value is 0.3415 > 0.05, so it can be concluded that the residuals are normally distributed.

b) Multicollinearity Test

Variable	Coefficient Variance	centered VIF	entered VIF
C	0.061744	40.01273	NA
ROE	4.83E-06	1.039104	1.003692
DAR	3.04E-05	3.295201	1.107431
MTB	0.000209	2.358055	1.015595
DPR	0.000361	44.15370	1.123353

Based on the multicollinearity test results, the Return on Equity Variable has a VIF value of 1.003692 < 10, the Debt to Asset Variable has a VIF value of 1.107431 < 10, the Market to book value Variable has a VIF value of 1.015595 < 10, the Dividend Policy Variable has a VIF value of 1.123353 < 10. It can be concluded that there is no multicollinearity.

4.4 Panel Data Regression Analysis Results

Dependent Variable: DPR__Y_
Method: Panel Least Squares
Date: 05/28/24 Time: 09:54
Sample: 2019 2023
Periods included: 5
Cross-sections included: 11
Total panel (unbalanced) observations: 54

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.287882	0.087151	3.303242	0.0018

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ROE	-61.88447	19.73031	-3.136519	0.0029
DAR	6.274177	4.443991	1.411834	0.1646
MTB	4.373326	8.638273	0.506273	0.6150

Based on the regression equation in the table above, the following partial multiple linear regression results can be obtained:

$Y = 0.2878 - 61.88 (X1) + 6.274 (X2) + 4.373326 (M) + \varepsilon 1$

Return On Equity (X1) has a significant negative effect on Dividend Policy, with a coefficient of -61.88 and a p-value of 0.0018 < 0.05. This means that every one unit increase in Return On Equity will decrease the Dividend Policy by -61.88.

Debt To Asset (X2) does not have a significant effect on Dividend Policy, with a coefficient of 6.274 and a p-value of 0.1646 > 0.05. This shows that an increase in Debt To Asset will contribute positively to Dividend Policy.

The company's Market to book value (MTB) (X3) does not have a significant effect on Dividend Policy, with a coefficient of 4.373 and a p-value of 0.6150 > 0.05. This shows that an increase in Market to book value will contribute positively to Dividend Policy.

a) Moderation Test

Moderation test results table omitted for brevity

Dependent Variable: DPR__Y_
Method: Panel Least Squares
Date: 05/28/24 Time: 09:54
Sample: 2019 2023
Periods included: 5
Cross-sections included: 11
Total panel (unbalanced) observations: 54

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ROE_X1__FIRM_SIZE__MODER	2.018621	0.635581	3.176026	0.0026
DAR_X2__FIRM_SIZE__MODER	-0.205409	0.139492	-1.472557	0.1475
MTB_X3__FIRM_SIZE__MODER	-0.146127	0.271169	-0.538879	0.5925

Firm Size is a moderating factor that affects the relationship between the independent variables, namely Return On Equity (ROE), Debt to Asset (DAR) and Market to book value (MTB) with the dependent variable, namely Dividend Payout Ratio. In this model, Firm Size has a moderating effect on the relationship between Return On Equity (ROE), Debt to Asset (DAR) and Market to book value (MTB) with the dependent variable, namely Dividend Payout Ratio (DPR).

The interaction between the Return on Equity ratio and moderation is also statistically significant. The probability value of the Firm Size moderating variable is 0.0026 < 0.05, which

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can be seen from the probability between interactions, so it can be concluded that Firm Size moderates the effect of Return on Equity on Dividend Payout Ratio. The positive coefficient of 2.018621 indicates that the effect of Return on Equity on Dividend Payout Ratio is moderated by Firm Size.

The interaction between Debt to Asset (DAR) and moderation is not statistically significant. The probability value of the Firm Size moderating variable is 0.1475 > 0.05, which can be seen from the probability between interactions, so it can be concluded that Firm Size does not moderate the effect of Return on Equity on Dividend Payout Ratio. The negative coefficient of -0.205409 indicates that the effect of Debt to Asset (DAR) on Dividend Payout Ratio will decrease when Dividend Payout Ratio increases.

The interaction between Market to book value (MTB) and moderation is not statistically significant. The probability value of the Firm Size moderating variable is 0.5925 > 0.05, which can be seen from the probability between interactions, so it can be concluded that Firm Size does not moderate the effect of Market to book value (MTB) on Dividend Payout Ratio. The negative coefficient of -0.146127 indicates that the effect of Market to book value (MTB) on Dividend Payout Ratio will decrease when Dividend Payout Ratio increases.

b) Coefficient of Determination Test

Dependent Variable: DPR__Y_
Method: Panel Least Squares
Date: 05/28/24 Time: 09:54
Sample: 2019 2023
Periods included: 5
Cross-sections included: 11
Total panel (unbalanced) observations: 54

R-squared	0.351134	Mean dependent var	0.287852
Adjusted R-squared	0.268301	S.D. dependent var	0.344950
S.E. of regression	0.295068	Akaike info criterion	0.517203
Sum squared resid	4.092069	Schwarz criterion	0.775034
Log likelihood	-6.964479	Hannan-Quinn criter.	0.616638
F-statistic	4.239018	Durbin-Watson stat	0.626549
Prob(F-statistic)	0.001723		

The R-Square value of 0.3511 or 35.11% is a measure of the goodness of fit of a regression model. In addition, this means that 35.11% of the variation can be explained by the three independent variables, namely Return on Equity, Debt to Asset and Market to book value on dividend policy moderated by Firm Size. The remaining 64.89% is influenced by other variables not examined in this study, while the F-Statistic value of 4.2390 and a very low probability of 0.0017 indicate that the overall model is significant.

4.5 Discussion

a) The Effect of Return on Equity on Dividend Payout Ratio with Firm Size as a Moderating Variable

Based on the test results obtained, the value of Return on Equity on Dividend Payout Ratio has a significance number of 0.0026 < 0.05. This means Ho is rejected. The results of this

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hypothesis test show that Return on Equity affects Dividend Policy with Firm Size as a Moderating Variable.

Large company size will have more profits so that it will have an impact on dividend payments to shareholders. In research conducted by Musiega et al. (2013) stated that the firm size moderating variable has an effect on the relationship between return on equity and dividend policy. Companies that have more profits will have an impact on lower dividend payments.

b) The Effect of Debt to Asset on Dividend Payout Ratio with Firm Size as a Moderating Variable

Based on the test results obtained, the value of Debt to Asset on Dividend Policy moderated by Firm Size has a significance number of 0.1475 > 0.05. This means Ho is accepted. The results of this hypothesis test show that Debt to Asset has no effect on Dividend Policy with Firm Size as a Moderating Variable. A high DAR indicates a large debt burden, thereby reducing the net income available for distribution as dividends. Companies tend to limit dividend payments to allocate more funds to pay debt obligations. Companies with high Debt to Asset are considered risky by investors, so companies need to pay higher dividends to attract investors. Firm size cannot moderate the effect of Debt to Asset on Dividend Policy. Large companies usually have easier access to external funding sources, so high Debt to Asset does not significantly affect the ability to pay dividends. Conversely, small companies with high Debt to Asset will find it more difficult to pay dividends due to limited funding access, this is in line with research conducted by Roni et al. (2021)

c) The Effect of Market to book value on Dividend Policy with Firm Size as a Moderating Variable

Based on the test results obtained, the value of Market to book value on Dividend Policy has a significance number of 0.5925 > 0.05. This means Ho is accepted. The results of this hypothesis test show that Market to book value has no effect on Debt to Asset on Dividend Policy with Firm Size as a Moderating Variable.

Firm size cannot moderate the effect of Market to book value on Dividend Policy. Large companies usually have easier access to external funding sources, so even though Market to book value is high, they can still pay higher dividends. Conversely, small companies with high Market to book value tend to limit dividend payments more to fund investment opportunities. Large companies tend to be able to pay higher dividends even though Market to book value is high, while small companies with high Market to book value tend to limit dividend payments, this is in line with research conducted by Maniaga (2021).

5. Conclusion

Based on the results of hypothesis testing using panel data regression analysis with independent variables Return on Equity, Debt to Asset, Market to book value and dependent variable Dividend policy with Firm Size as a moderating variable in Manufacturing companies listed on LQ45 for the 2019-2023 period, the results show as follows:

a) Return on Equity has a significant effect on dividend policy, while Debt to Asset and Market to book value have no significant effect on dividend policy.

b) Firm size moderates the effect of Return on Equity on dividend policy, while Debt to Asset and Market to book value do not significantly moderate the effect of liquidity on dividend policy.

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