MANAGERIAL OWNERSHIP AND DIVIDEND PAYMENT POLICY (Case Study on Manufacturing Companies Listed on IDX During the Period 2010-2019)

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Abstract

Dividend catering theory explains that the dividend payment policy is closely related to fulfilling the requests of investors as share owners. When there is an increase in investor demand for dividend payments, the percentage of managers as company representatives in making policies to increase dividend payments will be greater. However, the existence of managers who are also share owners is a problem in itself when paying dividends. This research aims to measure the significance of the influence of managerial ownership, the presence of the manager as the majority shareholder, and the number of shares owned by the manager on dividend payments. The samples in this research were 33 manufacturing companies on the Indonesia Stock Exchange in the 2010-2019 period which were determined using purposive sampling techniques. The data analysis technique used is panel data regression analysis technique. The results of this research state that managerial ownership, the presence of the manager as the majority shareholder, and the number of shares owned by the manager have a significant negative effect on dividend payments.

Keywords: *Dividend Catering Theory, Managerial Ownership, Dividend Payments*

1. INTRODUCTION

In addition to changes in investment value and capital requirements, the ownership structure can also change when the company experiences development and enters the next stage in the business life cycle. According to Bojańczyk (2010), changes in ownership structure are a consequence of the development of a company, where the company transitions from individual ownership to institutional ownership. When the ownership structure changes, it also has an impact on the separation of management and ownership matters. Owners will tend to appoint qualified agents as managers to run the company (Ningsih et al., 2021). The owner's decision regarding the management of a company run by someone else is prone to problems between the two parties. One of the problems that is often encountered is the conflict of interest that stems from the different goals of managers and owners. On the one hand, managers want to get a bigger salary and power. Meanwhile, the owner has an interest in maximizing the benefits obtained in the form of increasing share prices and dividend payments. Agency theory formulated by Jensen, (1976) states that conflicts of interest around agency problems are caused by managers as agents who only focus on personal interests rather than the interests of the owner. In addition, Jensen (1986) argues that conflicts of interest can also originate from companies that have large free cash flows, where the amount of free cash flow affects managers' protection against external control and managers' tendency to invest in low-return projects. Therefore, to resolve the conflict of interest, the owner is forced to incur additional costs commonly referred to as agency costs to monitor manager performance. Agency costs can be reduced in nominal terms by minimizing conflicts of interest through dividend payments. In addition to reducing agency costs, dividend payments can also have an impact on increasing external control. This happens because dividend payments require companies to raise new funds

from the capital market, where the capital market will act as an external control to monitor manager performance (Easterbrook, 1984). Meanwhile, Bhattacharyya (2007) in his research also states that dividend payments are proven to be effective in reducing agency costs.

Dividend payments can be utilized as a means to reduce agency costs, and this can be achieved by considering the ownership structure. In this regard, majority shareholders play a crucial role in formulating policies that aim to minimize conflicts of interest (Gugler & Yurtoglu, 2003). Neves (2010) further emphasizes that concentrated ownership with majority shareholders should possess the ability to exercise control and oversee managerial performance through actions such as terminating low-return investments and distributing income in the form of dividends. These actions are also intended to safeguard the interests of minority shareholders, particularly in civil law countries where their protection may be insufficient. However, the prevailing reality often contradicts these intentions. Majority shareholders frequently exploit their power, depriving minority shareholders of their rightful share of profits (Dahya et al., 2008).

The impact of dividend payment policy on reducing agency costs and conflicts of interest can be enhanced when there is managerial ownership in the company. Managers who are also shareholders are expected to align the interests of insiders and outsiders. However, Pindado & De la Torre, (2006) argue that the relationship between shareholders and managers is non-monotonic. At higher levels of managerial ownership, there is a reinforcing effect, while at lower levels, there is a convergence effect. Managers demonstrate their alignment with minority shareholders' goals through dividend payments. However, as managerial ownership increases, managers may prioritize their personal financial benefits over the rights of minority shareholders (Neves, 2010). On the other hand, the context of behavioral finance offers a different perspective. According to the dividend catering theory proposed by Baker & Wurgler, (2004), managers should consider investor sentiment when deciding on dividend policies. They issue dividends when the market values dividend-paying firms more than non-paying firms, and vice versa. However, this theory does not account for managerial ownership. This raises the question of whether the dividend payout policy based on investor sentiment only applies when managerial ownership is low. Is the dividend catering theory not relevant to the ownership structure, particularly the number of shares owned by managers? These questions have not been extensively explored in the literature and research. Therefore, the author of this study formulates the problem as follows:

1. Does managerial ownership affect the company in fulfilling investor sentiment towards dividend payments?
2. Do managers who are also majority shareholders affect the company in fulfilling investor sentiment towards dividend payments??
3. Does the number of shares owned by managers affect the company in meeting investor sentiment towards dividend payments?

2. LITERATURE REVIEW

Behavioral aspects have been taken into account in numerous studies that examine financial phenomena. Among these aspects, the dividend catering theory, initially proposed by Baker & Wurgler (2004), focuses on the review of dividend payment policies. According to this theory, the dividend payment policy is closely linked to meeting the demands of investors who are shareholders. When there is a rise in investor demand for dividend payments, companies are

more likely to increase their dividend payment policies. In essence, companies pay dividends when the capital market values those that distribute dividends higher than those that do not.

After the emergence of dividend catering theory, numerous subsequent studies have indicated that this theory, by considering investor sentiment, can effectively address issues related to dividend payments. According to Ferris et al., (2008), dividend catering theory plays a crucial role in uncovering the impact of concentrated ownership on dividend payments and explaining the variations in dividend payout policies across different countries. However, it is worth noting that dividend catering theory fails to account for managerial ownership (Pieloch-Babiarz, 2020). These two statements present a clear contradiction, which raises several questions about the applicability of dividend catering theory in the context of managerial ownership, particularly for managers who possess a significant number of shares.

Neves (2014) introduces a fresh area of research that explores dividend catering theory. In his study, he examines how ownership structure affects companies' inclination to adjust dividend payments based on investor sentiment. The research, conducted from 1990 to 2003 and involving 487 companies across nine European countries, reveals four key findings. Firstly, high managerial ownership negatively impacts the fulfillment of investor sentiment regarding dividends. Secondly, there is a negative correlation between the influence of dividend catering theory and the number of shares held by majority shareholders. Thirdly, the presence of a second majority owner moderates the extent to which the company meets investor sentiment. Lastly, the combined effect of the first and second majority shareholders in catering to investor sentiment depends on whether they compete or collude. Neves (2014) study stands out as the sole research that specifically examines the impact of ownership structure on dividend payout policy within the context of dividend catering theory, setting it apart from other studies.

3. RESEARCH METHOD

The research method employed in this study involves selecting the population from all manufacturing companies listed on the Indonesia Stock Exchange (IDX) over a period of 10 years, specifically from 2010 to 2019. The decision to focus on companies in the manufacturing sector as the research population is based on several factors. Firstly, these companies tend to have a relatively large size, high capitalization, and good stability, making them suitable for analysis. Additionally, there is a significant number of dividend-paying companies within this sector. By focusing on mature companies, the author is able to conduct longitudinal research, which allows for a more comprehensive understanding of the topic. Furthermore, by narrowing the scope to one sector, the author can avoid potential issues related to heterogeneity when examining the impact of managerial ownership on dividend payments in relation to investor sentiment.

Once the research population has been identified, the subsequent step involves determining the research sample. In order to meet the predetermined criteria, companies must adhere to the following conditions:

1. The companies must be manufacturing companies that are listed on the Indonesia Stock Exchange (IDX) within the time frame of 2010-2019.
2. These companies should have published their annual financial reports either on their official company website or on the IDX website during the period of 2010-2019.

3. It is essential for the companies to fulfill the panel data requirements, which necessitate the publication of annual financial reports for a minimum of six consecutive years within the 2010-2019 timeframe.
4. The utilization of unbalanced panel data is permissible, meaning that companies are not obligated to possess observation data for every consecutive year. However, they must still meet the panel data requirements outlined in the previous point.

Through the utilization of the documentation approach, essential financial information is gathered by extracting data from annual financial reports and supplementary data sourced from the ICMD (Indonesia Capital Market Directory). Furthermore, the authors also employ the literature review method, whereby data for this approach is acquired through the examination of books or literature pertaining to the issues addressed in this research.

To achieve the objectives according to the formulation of the problem in this study, the authors make several hypotheses as follows:

H_1: Managerial ownership has a negative effect on companies in meeting investor sentiment towards dividend payments

H_2: The presence of managers as majority shareholders negatively affects the company in meeting investor sentiment towards dividend payments

H_3: The large number of shares owned by managers negatively affects the company in meeting investor sentiment towards dividend payments

Following the removal of non-conforming data, the final sample comprises of 33 firms, encompassing a total of 319 observations. To assess the influence of managerial ownership on dividend payout adjustments and its impact on investor sentiment, an unbalanced panel of companies (i = 1, 2, …., 33) observed over multiple time periods (t = 1, 2, …, 10) is analyzed using a random effects model. In this model, the individual-specific effects are considered as random variables that are independent of the explanatory variables. The decision to employ the random effects model was based on the results of the F test, Breusch-Pagan test, and Hausman test. These three tests indicated that the random effects model is the most suitable model for this study, surpassing both the combined model and the fixed effects model in terms of the specified criteria.

In order to validate the hypotheses and achieve outcomes that align with the research objectives, the authors suggest the utilization of three regression models for estimation. Nevertheless, prior to incorporating these three regression models, the author presents a fundamental model that can be expanded into three regression models based on the existing hypotheses. The subsequent formula is put forth as the initial framework:

$$CPR_{it} = \gamma_0 + \gamma_1 FCF_{it} + \gamma_2 D_{it} + \gamma_3 NI_{it} + \gamma_4 TANG_{it} + \gamma_5 SIZE_{it} + \gamma_6 CAT_{it} + \varepsilon_{it}$$

The dividend payout ratio, denoted as CPR_{it}, represents the proportion of net income generated by the i-th company in year t-1 that is distributed as dividends in year t. In this context, the author introduces a catering variable, $CAT_{i,t}$, which measures the disparity in price to book value between dividend-paying companies and non-dividend-paying companies, as suggested by Gajdka (2013). The calculation of this variable is as follows:

$$CAT_{i,t} = \frac{1}{dp_t} \sum_{k=1}^{dp_t} \left(\frac{p}{BV}\right)_{k,t} - \frac{1}{nd_t} \sum_{n=1}^{nd_t} \left(\frac{p}{BV}\right)_{n,t}$$

where dp_t represents the number of companies that pay dividends in the year *t*, while nd_t represents the number of companies that do not pay dividends in the year *t*. $(\frac{p}{BV})_{k,t}$ is the price to book value of the company that pays the kth dividend at the end of the year t, while $(\frac{p}{BV})_{n,t}$mis the price to book value of the company that does not pay the nth dividend at the end of year t. In addition, the author also uses other factors that affect the dividend payout ratio, including free cash flow FCF_{it}) as a proxy for company growth and health, *debt ratio* (D_{it}) to control capital structure, *net income* NI_{it} which indicates net income, tangible fixed assets $TANG_{it}$, company size $SIZE_{it}$ as a proxy for corporate financial strength, and ε_{it} as an error proxy to investigate whether the presence of managers in the ownership structure negatively affects the catering effect, the following model is proposed:

$$CPR_{it} = \gamma_0 + \gamma_1 FCF_{it} + \gamma_2 D_{it} + \gamma_3 NI_{it} + \gamma_4 TANG_{it} + \gamma_5 SIZE_{it} + CAT_{it}\ (\gamma_6 + \lambda_6 MANAG_{it}) + \varepsilon_{it}$$

Where $MANAG_{it}$ will take the value of 1 if at least one manager is a notified shareholder (i.e. the shareholder holds no less than 5% of the shares) and 0 otherwise. Then, the coefficient of the catering variable is represented by γ_6 for firms with no managers in the ownership structure and $\gamma_6 + \lambda_6$ for firms with managers as notified shareholders. In accordance with hypothesis H1, the coefficient of $\gamma_6 + \lambda_6$ is expected to be positive and statistically significant, although lower than γ_6. In all cases whenever the dummy variable equals 1 and both parameters $\gamma_6 + \lambda_6$ are significant, a linear regression test is required to find out whether the sum of $\gamma_6 + \lambda_6$ is statistically different from 0 (null hypothesis H0: $\gamma_6 + \lambda_6 = 0$).

To investigate whether managers as majority or largest shareholders in the ownership structure have a negative effect on the catering effect, the following model is proposed:

$$CPR_{it} = \gamma_0 + \gamma_1 FCF_{it} + \gamma_2 D_{it} + \gamma_3 NI_{it} + \gamma_4 TANG_{it} + \gamma_5 SIZE_{it} + CAT_{it}\ (\gamma_6 + \varphi_6 FIRST_{it}) + \varepsilon_{it}$$

Where $FIRST_{it}$ will take the value of 1 if the manager is the majority or largest shareholder and 0 otherwise. Then, the coefficients of catering variables are indicated by γ_6 for firms without managers as majority shareholders and $\gamma_6 + \varphi_6$ for firms with managers as majority shareholders. In accordance with hypothesis H_2, the coefficient of $\gamma_6 + \varphi_6$ is expected to be lower than γ_6.

To study the impact of the number of shares owned by managers, the authors try to evaluate the moderating role of managerial ownership on dividend catering theory, the interaction between the catering effect and the share of managers in the ownership structure is investigated with the following model:

$$CPR_{it} = \gamma_0 + \gamma_1 FCF_{it} + \gamma_2 D_{it} + \gamma_3 NI_{it} + \gamma_4 TANG_{it} + \gamma_5 SIZE_{it} + CAT_{it}\ (\gamma_6 + \xi_6 SHARE_{it}) + \varepsilon_{it}$$

Where $SHARE_{it}$ will take the value of 1 if the managerial ownership level is above 20% (i.e. if a manager is a significant investor who has real control over the firm) and 0 otherwise. Then, the coefficients of the catering variables are represented by γ_6 for firms without managers as significant investors and $\gamma_6 + \xi_6$ for firms with managers who own at least 20% of the shares. In accordance with hypothesis H_3, the coefficient of $\gamma_6 + \xi_6$ is expected to be lower than γ_6

4. RESULTS AND DISCUSSION

4.1. Overview of Research Objects

Table 1. Total Population and Research Sample During 2010 – 2019

Criteria	Number of Companies
Manufacturing companies listed on the BEI	194
Manufacturing companies that do not publish financial reports on the BEI	(7)
Manufacturing companies that publish financial reports on the BEI	187
Manufacturing companies whose financial statements are not available for six consecutive years on the BEI	(83)
Manufacturing companies whose financial reports are available for six consecutive years on the BEI	104
Manufacturing companies on the BEI that do not have managerial ownership	(71)
Number of samples	33

Based on Table 1, there are 33 companies that meet the sample criteria in this study using the purposive sampling method. By combining 33 companies for 10 years, the final sample of 319 data was obtained.

4.2. Descriptive Analysis

Table 2. Descriptive Statistical Analysis of Data

Variables	n	Minimum	Maximum	Mean	Standard Deviation
Dividend Payout Ratio (CPR)	319	-0.193	5.455	0.166	0.396
Free Cash Flow (FCF)	319	-0.240	0.284	0.018	0.087
Debt (D)	319	0.037	1.420	0.435	0.229
Net Income (NI)	319	-1.39×10^{12}	1.99×10^{12}	1.12×10^{11}	3.37×10^{11}
Tangibility (TANG)	319	0.029	0.757	0.409	0.190
Company Size (SIZE)	319	25.082	32.311	27.901	1.376
Catering (CAT)	319	-2.399	1.748	0.623	1.107
CAT MANAG	319	-2.399	1.748	0.484	0.883
CAT FIRST	319	-2.399	1.748	0.204	0.640
CAT SHARE	319	-2.399	1.748	0.338	0.760

Descriptive data analysis aims to provide information about the variables studied. The variables in this study consist of, among others, the payment ratio (CPRit) as the dependent variable and explanatory variables which include free cash flow, debt, net income, tangible assets, and company size. Meanwhile, the independent variables include CAT, CAT_MANAG, CAT_SHARE, dan CAT_FIRST.

Based on Table 2, several findings are presented, namely the dividend payout ratio (CPRit) average of 0.166 with a minimum value of 0.193 and a maximum value of 5.455, which indicates that the company pays 16.60% of the company's total profit to be allocated as dividends to shareholders. Meanwhile, the standard deviation of the payout ratio is 0.396. The standard deviation value which is higher than the average value indicates that the diversity of the dividend payout ratio in the sample companies is high. High data diversity also occurs in explanatory variables such as free cash flow which produces an average value of 0.018 with a standard deviation of 0.087 and net income which produces an average value of 112 billion with a standard deviation of 337 billion.

Explanatory variables such as debt, tangible assets, and company size have a lower level of diversity compared to other explanatory variables. This happens because the standard deviation of these three variables is lower than their mean value. The average value of the debt variable is 0.435 with a standard deviation of 0.229, while the average value of tangible assets is 0.409 with a standard deviation of 0.109. Then, the average value of company size is 27,901 with a standard deviation of 1,376.

Independent variables such as C*AT, CAT_MANAG, CAT_FIRST,* and *CAT_SHARE* The mean value is smaller than the standard deviation, so it can be concluded that the data diversity is high for managerial ownership, the presence of managers as majority shareholders, and the number of shares owned by managers. The average value of managerial ownership of sample companies is 48.40%, the presence of managers as majority shareholders is 20.40%, and the number of shares owned by managers is 33.80%.

4.3. Determination of Panel Data Regression Model

The panel data regression model consists of 3 types of models, including *Common Effect Mod*el (CEM), *Fixed Effect Model* (FEM), dan *Random Effect Model* (REM). Before further analysis, a determination test can be conducted to produce the best model that fits the data in this study.

There are 3 commonly used panel data regression model determination tests, including the chow test, Hausman test, and Lagrange multiplier test. The model determination test results for the three panel data regression models are shown in Table 3 as follows:

Table 3. Regression Model Determination Test Result

Model Test	Model I (MANAG)		Model II (FIRST)		Model III (SHARE)	
	Results	Result	Results	Result	Results	Result
Chow Test	F = 2.517	FEM	F = 2.514	FEM	F = 2.290	FEM
	p = < 0.001		p = < 0.001		p = < 0.001	
Hausman Test	χ^2 = 2.236	REM	χ^2 = 2.829	REM	χ^2 = 2.921	REM
	p = 0.897		p = 0.830		p = 0.819	
Lagrange Test	BP = 16.789	REM	BP = 16.109	REM	BP = 12.705	REM
	p = < 0.001		p = < 0.001		p = < 0.001	

In the chow test, the probability value (P-value) cross section *F* of the three regression models contains all the same results, namely 0.001 <0.05 so that the H_0 hypothesis is rejected and H1 is accepted, which means that the *Fixed Effect Model* (FEM) is a more suitable model to use than the *Common Effect Model* (CEM). Then in the Hausman test, the chi-square probability values of the three regression models contain approximately the same results, namely 0.897; 0.830; 0.819, where these results are greater than 0.05 so that the H0 hypothesis is accepted and H1 is rejected, which means that the *Random Effect Model* (REM) is a more suitable model to use than the *Fixed Effect Model* (FEM). Finally, in the Lagrange multiplier test, the Breusch-pagan cross section probability value of the three regression models contains all the same results, namely 0.001 <0.05 so that the H_0 hypothesis is rejected and H_1 is accepted, which means that the *Random Effect Model* (REM) is a more suitable model to use than the *Fixed Effect Model* (FEM).

Based on the review of the test results of determining the panel data regression model above, it can be concluded that the most suitable panel data regression model in this study is the *Random Effect Model* (REM).

4.4. Classical Assumption Test

The results of the panel data regression model determination test have determined that the Random Effect Model (REM) model will be used in the subsequent effect test analysis. Before other influence tests are carried out, the selected model must be tested for classical assumptions. Classical assumption testing aims to avoid bias problems in data analysis. There are several classic assumption tests in this study, including normality test, multicollinearity test, autocorrelation test, and heteroscedasticity test.

a. Normality Test

The normality test in this study was carried out with the Jarque Bera test, the results of which are shown in Table 4.

Table 4. Normality Test Results

Regression Model	*Jarque Bera*	p
I (MANAG)	114827.5	< 0.001
II (FIRST)	121421.3	< 0.001
III (SHARE)	128865.0	< 0.001

The results of the normality test on the three panel data regression models obtained a probability value of <0.001 each which is smaller than 0.05. This probability value indicates that the residual distribution is not normally distributed. However, this is understandable and statistically acceptable because the number of samples used is relatively large, exceeding 300 samples in accordance with the Central Limit Theorem theory. The Central Limit Theorem states that the larger the sample size used, the distribution of the sample mean will automatically approach the normal distribution, even though the data is not normally distributed (Stark, 2017).

b. Multicollinearity Test

The results of the multicollinearity test on the three panel data regression models can be presented in the table below:

Table 5. Multicollinearity Test Results

Variable	FCF	D	NI	TANG	SIZE	CAT	CAT MANAG	CAT FIRST	CAT SHARE
FCF	1.00								
D	-0.20	1.00							
NI	0.26	-0.10	1.00						
TANG	-0.07	0.26	-0.09	1.00					
SIZE	0.07	0.23	0.41	0.42	1.00				
CAT	-0.05	0.03	-0.07	-0.01	-0.00	1.00			
CAT MANAG	-0.08	-0.04	-0.10	-0.14	-0.18	0.52	1.00		
CAT FIRST	-0.16	0.11	-0.20	0.00	-0.05	0.46	-	1.00	
CAT SHARE	-0.14	0.13	-0.14	-0.01	0.02	0.57	-	-	1.00

According to the findings presented in Table 5, the correlation coefficient between the independent variables and the explanatory variables in this research can be deemed secure. The proximity values range from -0.002 to 0.571, indicating that they fall within the very low to fairly strong category. By considering a correlation threshold of > 0.8 and < -0.8 as an indicator, it can be inferred that there is no issue of multicollinearity in this study.

c. Autocorrelation Test

The Durbin Watson method is employed to ascertain the outcomes of the autocorrelation test and draw conclusions from it. The autocorrelation test results are presented in Table 6 as depicted below.

Table 6. Autocorrelation Test Results

Model	du	dw	4-du
I (MANAG)	1.778	1.921	2.222
II (FIRST)	1.778	1.936	2.222
III (SHARE)	1.778	1.928	2.222

The Durbin Watson values obtained from the autocorrelation test results in Table 6 for the three panel data regression models are 1.921, 1.936, and 1.928. These values fall within the range of the du value of 1.778 and the 4-du value of 2.222. Therefore, based on this analysis, it can be inferred that the three models are suitable for testing purposes and do not exhibit any autocorrelation issue.

d. Heteroscedasticity Test

The Glejser test was employed to conduct the heteroscedasticity test in this study. The outcomes of this test, which assesses the presence of heteroscedasticity, are presented in the table below for the three panel data regression models:

Table 7. Heteroscedasticity Test Results

Variables	Model I MANAG β (Prob)	Model II FIRST β (Prob)	Model III SHARE β (Prob)
C	-0.978 (0.064)	-1.005 (0.061)	-1.069 (0.056)
FCF	0.538 (0.065)	0.533 (0.066)	0.457 (0.119)
D	-0.071 (0.336)	-0.075 (0.318)	-0.050 (0.500)
NI	2.13×10^{-13} (0.092)	2.15×10^{-13} (0.172)	2.00×10^{-13} (0.059)
TANG	0.011 (0.912)	0.009 (0.923)	-0.022 (0.824)
SIZE	0.041 (0.102)	0.042 (0.093)	0.044 (0.075)
CAT	0.026 (0.227)	0.016 (0.330)	0.026 (0.130)
CAT_MANAG	-0.026 (0.335)	-	-
CAT_FIRST	-	-0.022 (0.448)	-
CAT_SHARE	-	-	-0.044 (0.090)

Based on the results from Table 7, the probability values for each variable in the heteroscedasticity test are higher than the significance value ($\alpha = 0.05$). Hence, we can infer that there is no presence of heteroscedasticity in the regression model used for this study.

4.5. Hypothesis Test

Table 8. Random Effect Model (REM)

Variables	Model I MANAG β (Prob)	Model II FIRST β (Prob)	Model III SHARE β (Prob)
C	-0.919 (0.073)	-1.190 (0.018)	-1.301 (0.009)
FCF	0.909 (0.000)*	0.889 (0.000)*	0.860 (0.001)*
D	-0.138 (0.149)	-0.121 (0.207)	-0.099 (0.296)
NI	2.50×10^{-13} (0.000)*	2.25×10^{-13} (0.002)*	2.16×10^{-13} (0.003)*
TANG	-0.003 (0.982)	0.012 (0.926)	-0.014 (0.912)
SIZE	0.040 (0.042)*	0.049 (0.011)*	0.053 (0.005)*
CAT	0.057 (0.039)*	0.028 (0.175)	0.055 (0.013)*
CAT_MANAG	-0.082 (0.020)*	-	-
CAT_FIRST	-	-0.074 (0.045)*	-
CAT_SHARE	-	-	-0.120 (0.000)*
F (Prob)	10.657 (0.000)	10.409 (0.000)	12.043 (0.000)
R^2	0.193	0.190	0.213

After all the prerequisite tests for regression analysis have been met, hypothesis testing on the *Random Effect Model* (REM) can be carried out. Hypothesis testing aims to test the level of influence of independent variables consisting of managerial ownership *(CAT_MANAG*), the presence of managers as majority shareholders (*CAT_FIRST*), and the number of shares owned by managers (*CAT_SHARE*) on the dividend payout ratio (*CPRit*) as the dependent variable with a number of companies as samples over several periods of time.

Based on the *Random Effect Model* (REM) estimation results of the three panel data regression models in Table 8, the hypothesis test can be explained as follows:

a. T test

The T test is used to determine the impact of each independent variable on the payout ratio (CPRit). In model 1, the regression coefficient for the CAT_MANAG variable is -0.082, indicating a negative relationship. This means that as managerial ownership increases, the dividend payout ratio decreases. Additionally, the probability value for CAT_MANAG is 0.02, which is less than 0.05. Therefore, it can be concluded that managerial ownership has a significant negative effect on the dividend payout ratio.

Moving on to model 2, the regression coefficient for the CAT_FIRST variable is -0.074, also indicating a negative relationship. This means that if the presence of managers as majority shareholders increases, the dividend payout ratio will decrease. The probability value for CAT_FIRST is 0.045, which is less than 0.05. Hence, it can be concluded that the presence of managers as majority shareholders has a significant negative effect on the dividend payout ratio.

In model 3, the regression coefficient for the CAT_SHARE variable is -0.120, again indicating a negative relationship. This means that as the number of shares owned by managers increases, the dividend payout ratio decreases. The probability value for CAT_SHARE is 0.00, which is less than 0.05. Therefore, it can be concluded that the number of shares owned by managers has a significant negative effect on the dividend payout ratio. Hence, all three hypotheses in this study have been statistically proven to be correct.

b. F Test

The F test is designed to assess the relationship between the dependent variable and the independent variable. Based on the findings of the F test in Table 8, it is evident that the independent variables have a significant impact on the payment ratio (CPRit) with a significance value of 0.00 <0.05.

c. Determination Coefficient Test (R^2)

The coefficient of determination test can be conducted to assess the extent to which the independent variables can account for the dependent variable. In model 1, the Adjusted R^2 value is calculated as 0.193, indicating that 19.3% of the variation in the dividend payout ratio can be explained by the independent predictor variables. Similarly, in model 2, the Adjusted R2 value is determined to be 0.190, implying that 19% of the diversity in the dividend payout ratio can be accounted for by the independent predictor variables. In model 3, the Adjusted R2 value is found to be 0.213, signifying that 21.3% of the diversity in the dividend payout ratio can be explained by the independent predictor variables. Consequently, the remaining 80.7%, 81%, and 78.7% in the three models, respectively, are attributed to other variables that are not considered in the study.

4.6. Discussion

a. Managerial Ownership Negatively Affects Dividend Payment

The first hypothesis, specifically regarding managerial ownership, yields a probability value of 0.02 <0.05. This suggests that managerial ownership has a negative impact on dividend payments. Therefore, based on the findings presented in Table 8, we can accept the hypothesis that managerial ownership negatively affects dividend payments. This is further supported by the negative coefficient value of -0.082 for managerial ownership, indicating a contradictory relationship between managerial ownership and dividend payments. When managerial ownership is high, dividend payments tend to be lower, and vice versa.

These results align with the research conducted by Neves (2010), who found that investors' preference for dividend-paying stocks leads to a lower dividend payout ratio in companies with a high level of managerial ownership.

However, this study contradicts the research conducted by Pieloch-Babiarz (2020), which suggests that the coefficient value for managerial ownership is not statistically significant at the accepted significance level.

b. The Presence of Managers as Majority Shareholders Negatively Affects Dividend Payment

The second hypothesis, namely the presence of managers as majority shareholders, provides a probability value of 0.045 <0.05, which indicates that the presence of managers as majority shareholders has a negative effect on dividend payments so that the hypothesis stating that the presence of managers as majority shareholders has a negative effect on dividend payments can be accepted due to the research results shown in Table 8. This is also supported by the coefficient value of the presence of managers as majority shareholders which has a negative value of -0.074, which indicates that the relationship between managers as majority shareholders and dividend payments is contradictory. When the manager also doubles as the majority shareholder, the dividend payment will be lower, and vice versa.

These findings align with the research conducted by Pieloch-Babiarz (2020), who found that when managers own a significant number of shares, the catering effect weakens, resulting in reduced dividend payments. This suggests that in companies with concentrated managerial

ownership, managers prioritize personal control over maximizing dividends for other shareholders.

c. The Number of Shares Owned by Managers Has a Negative Effect on Dividend Payments

The third hypothesis, namely the number of shares owned by managers, provides a probability value of 0.00 <0.05, which indicates that the number of shares owned by managers has a negative effect on dividend payments so that the hypothesis stating that the number of shares owned by managers has a negative effect on dividend payments can be accepted due to the research results shown in Table 8. This is also supported by the negative coefficient value of -0.120, which indicates that the correlation between the number of shares owned by managers and dividend payments is contradictory. When the number of shares owned by the manager increases, the dividend payment will be lower, and vice versa.

Meanwhile, this study is not in line with research conducted by Pieloch-Babiarz (2020) which states that the relationship between the two, the presence of managers who own at least 20% of shares on the number of dividends paid to investors, cannot be concluded

5. CONCLUSSION

After conducting panel data regression analysis, the following conclusions can be drawn: firstly, managerial ownership negatively impacts dividend payments. Therefore, if a company has managerial ownership, the dividend payments will be lower. This indicates that managers who own shares are more likely to prioritize their own interests and allocate company funds to investments with low returns. Secondly, the presence of managers as majority shareholders also has a negative effect on dividend payments. This implies that when managers simultaneously hold the majority of shares, the dividend payment will be lower. This suggests that in companies with highly concentrated managerial ownership, managers prioritize personal control over other shareholders, resulting in lower dividends. Finally, the number of shares owned by managers negatively affects dividend payments. This means that as the manager owns more shares, the dividend payment decreases.

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