



Ownership Structure on Dividend Policy in The Indonesian Stock Exchange

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Abstract

Purpose: This research analyses how ownership structure affects dividend policy.

Method: Quantitative with a pool least square (PLS) regression model was used as a research method, and the research sample was drawn from all non-financial sector companies registered in IDX from 2017 to 2021. Independent variables such as family ownership, institutional ownership, and concentration ownership. This research also has a control variable such as return on assets, debt to equity ratio, firm size, firm age, free cash flow, and volatility (business risk).

Result: This research found that family ownership, institutional ownership, concentration ownership, return on assets, firm size, age of firm, free cash flow, and volatility (business risk) all have a significant effect on dividend yield, but the debt to equity ratio has no effect.

INTRODUCTION

Companies that sell their share ownership to the public will not be separated from the agency problem. This problem arises because the manager can use the profit in the company to fulfil his interest, not for the shareholders' wealth (Jensen & Meckling, 1976). This condition is a problem that must be understood by companies to reduce agency problems and to make the financial well-being of shareholders. Jensen (1986), Rozeff (1982), Liang et al. (2023). Nanjing: Dividend payouts under a societal crisis: Financial constraints or signaling? *International Review of Financial Analysis*, 102705. states that corporations can avoid agency difficulties by providing returns to shareholders in the form of dividend programs. A dividend policy will be able to assist companies in managing profits to reduce agency problems that occur. However, dividend policy is a susceptible subject, so the balance of decisions regarding this policy will be easily influenced by the company's ownership structure (Reyna, 2017). Therefore, this issue is exciting and important to explore in order to assist investors in understanding how ownership structure affects dividend policy in order to achieve financial well-being from their investments. The ownership structure represents corporate governance which is expected to be a connecting facility of shareholder rights while avoiding the opportunistic nature of company managers. Corporate governance shows the company's commitment to the implementation of GCG

values including dividend policy. This is very important to foster investor confidence, because dividends are a signal that the company is in good condition. Although Indonesia's ranking in GCG implementation is still relatively low compared to other countries in Asia (ACGA, 2020), internally there is an improvement process. This can be seen in the phenomenon of dividend payers for companies in Indonesia increasing, also in magnitude the amount of dividends occurs the same pattern.

The research objective is to prove the effect of ownership structure on dividend policy in companies registered on stock markets between 2017 and 2021. The advantages of this research include (1) This research will help provide an overview to companies regarding how ownership structure can influence the dividend policy, which will help the company to make dividend decisions in reducing agency problems; (2) Provide new knowledge and insight to readers about how the ownership structure can influence dividend policy; (3) Help investors to reach their financial well-being by making investment decisions in the right companies; (4) This research is also expected to become literature for further studies that discuss the ownership structure of dividend policy.

The relationship of ownership structure to dividends can be seen in agency theory and dividend policy (Baker et al., 2021; Lin et al., 2023). Agency theory is a theory that discusses problems that occur between managers (agents) and owners (principals) and how to solve these problems (Jensen & Meckling, 1976). The relationship in agency theory itself is a contractual relationship of company share ownership held by individuals or groups of people (principals) by delegating authority to managers (agents) in the company to carry out operational activities and decision-making. However, this contractual relationship can cause some problems (agency problems) because of differences in interests between the agent and the principal. It happens because the managers prioritize personal interests and ignore shareholders (Jensen & Meckling, 1976). In overcoming this, one of the policies that can be carried out is distributing dividends to proportionally shift the distribution of the company's cash flows which the majority shareholder can misuse (Murhadi, 2010; Pettenuzzo et al., 2023). The outcome model describes the link between the agency problem and the dividend policy (Murhadi, 2010). Furthermore, the substitution model may explain the link between agency problems and dividend policy (Murhadi, 2010). This model shows that firms with strong corporate governance pay fewer dividends because good corporate governance is effective and capable of reducing agency problems in organizations (Tawfik et al., 2022).

Based on that theory, ownership structure influences dividend policy; hence, if it is connected to family ownership, institutional ownership, or concentrated ownership, the relationship with dividend policy may be described as follows. Due to the study by Hasan et al. (2023), Yoshikawa & Rasheed (2010), Isakov & Weisskopf (2015), and La Porta et al. (2000), family ownership has a positive relationship with dividend policy because family ownership tends to pay higher dividends because it protects the rights of minority shareholders from the second type of agency problem. Dividend policy is positively related to institutional ownership. The prior research by Mehdi et al. (2017), Chang et al. (2016), and Tayachi et al. (2021) shows that institutional ownership will affect the corporate governance of the company. As a result of this explanation, institutional ownership will have a positive impact on the company's dividend policy. In the last variable, concentration ownership has a positive relationship with the dividend policy. According to Shleifer & Vishny (1986) and Khan (2022), monitoring can help to reduce agency problems caused by providing large dividends to minority shareholders. The explanation of the connection between ownership structure and dividend policy might thus lead to the following hypothesis:

- H1: Family ownership positively affects dividend policy.
- H2: Institutional ownership positively affects dividend policy.
- H3: Concentration ownership positively affects dividend policy.

RESEARCH METHODS

The current research is called basic research, and it uses a research design to test, improve, modify, and build hypotheses based on earlier research. Based on the study's aims, the research was done as causal research by examining the causal relationship between the independent and dependent variables. The ownership structure, which includes family, institutional, and concentrated ownership, is employed as an independent variable. Simultaneously, dividend policy in the form of dividend yield is the dependent variable. The total samples utilized, 299 were non-financial sector firms listed on the IDX from 2017 to 2021 under various conditions (see Table 1):

Table 1.
Selection of Research Objects of Non-financial Sector Companies

Criterion	Number of companies
Non-financial sector companies listed on the Indonesia Stock Exchange during the period 2017-2021	679
Criterion 1: Non-financial sector companies not listed during 2017-2021 have <i>been delisted, relisted, and suspended.</i>	(277)
Non-financial sector companies were listed during 2017-2021 and never <i>delisted, relisted, and suspended.</i>	402
Criterion 2: The Company did not publish audited financial statements during the period 2017-2021.	(50)
The Company publishes audited financial statements for the period 2017-2021.	352
Criterion 3: The company had negative equity during the period 2017-2021.	(27)
The company did not have negative equity during the 2017-2021 period.	325
Criterion 4: The company does not have complete data availability for research.	(26)
Total research sample (The company has complete data availability for research).	299

Source: data processed from IDX

The dividend yield (DY) represents the dependent variable in this study, which may be expressed as follows:

$$DY_{i,t} = \frac{\text{Dividend per share}_{i,t}}{\text{Market value per share}_{i,t}}$$

Family ownership (FMO), institutional ownership (IO), and concentration ownership (CONC) represents independent variable, which can be calculated as follows:

$$FMO_{i,t} = \frac{\text{Number of family shareholdings}_{i,t}}{\text{The number of shares outstanding}_{i,t}}$$

$$IO_{i,t} = \frac{\text{Number of institutional shareholdings}_{i,t}}{\text{The number of shares outstanding}_{i,t}}$$

$$CONC_{i,t} = \text{Total percentage of shareholders is more than } 5\%_{i,t}$$

This study also has control variables, so the research results can be better. The control variables used include profitability (ROA), leverage (DER), firm size (SIZE), firm age (AGE), free cash flow (FCF), and volatility (business risk) which can be formulated as follows.

$$ROA_{i,t} = \frac{\text{Net Income}_{i,t}}{\text{Total Assets}_{i,t}}$$

$$DER_{i,t} = \frac{\text{Total Debts}_{i,t}}{\text{Total Assets}_{i,t}}$$

$$SIZE_{i,t} = \text{Ln}(\text{total assets})_{i,t}$$

$$AGE_{i,t} = \text{research year} - \text{year the company established}_{i,t}$$

$$FCF_{i,t} = \frac{(\text{Operating Cash Flow}_{i,t} + \text{Capital Expenditure}_{i,t})}{\text{Total assets}_{i,t}}$$

$$Vol_{i,t} = \sqrt{\frac{\sum_{i=1}^{n=3} (\text{net income}_{i,t} - \text{average net income})^2}{n}}$$

The data processing method uses descriptive statistics (mean, maximum, minimum and standard deviation) with the pool least square (PLS) linear regression analysis. Based on the research variables employed in this study, equation of research model is constructed below.

$$DY_{i,t} = \alpha + \beta 1.FMO_{i,t} + \beta 2.IO_{i,t} + \beta 3.CONC_{i,t} + \beta 4.ROA_{i,t} + \beta 5.DER_{i,t} + \beta 6.SIZE_{i,t} + \beta 7.AGE_{i,t} + \beta 8.FCF_{i,t} + \beta 9.Vol_{i,t} + e$$

In order to ensure that the study's findings were BLUE (best, linear, unbiased, and estimator), a classical assumption test was also conducted. This classical assumption test comprises of four tests: normality, multicollinearity, autocorrelation, and heteroscedasticity. Furthermore, the regression model to be utilized in this study was chosen, which included pooled least squares and the specification fit model is fixed effect. The Chow and Hausman tests are used for selecting this model. In the final test, the hypothesis was examined using the inferential statistical test are F test, t-test, and coefficient of determination (R²) to discover how much the independent variable can explain the dependent variable.

RESULTS & DISCUSSION

The Eviews 10 program was employed for processing and testing in the current study. Table 2 summarizes the descriptive data.

Table 2.
Descriptive Statistics of Non-Financial Sector Companies

	Mean	Maximum	Minimum	Std. Dev	N
DY	0.020648	0.688300	0.000000	0.048984	1495
FMO	0.173318	0.971600	0.000000	0.281873	1495
IO	0.765349	0.999800	0.000000	0.243403	1495
CONC	0.731542	0.999400	0.128300	0.163079	1495
ROA	0.036679	0.921000	-1.022500	0.109875	1495
DER	1.427177	78.60740	0.001600	2.960522	1495
SIZE	29.08039	33.53720	24.56550	1.600420	1495
AGE	36.49833	115.0000	4.000000	17.79892	1495
FCF	0.025523	0.555800	-0.710800	0.103054	1495
VOL	4.34E+11	1.55E+13	1.44E+08	1.13E+12	1495

In testing the classical assumptions, the normality test results were obtained; the tests' results were as follows.

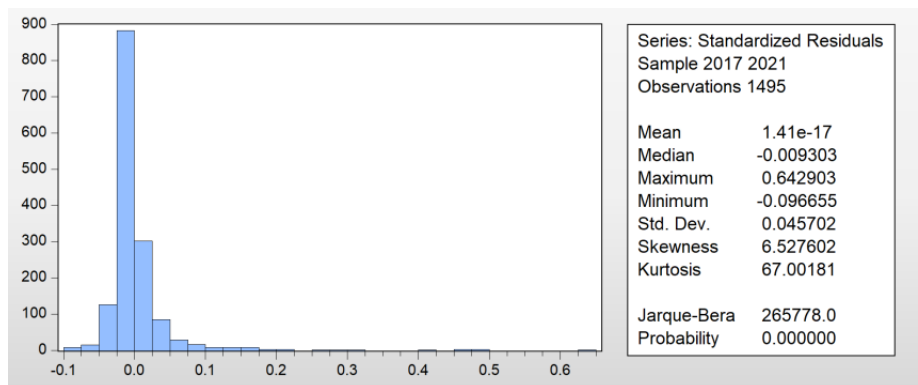


Figure 1. Normality Test Using the Pooled Least Square Method

The normality test reveal that the probability value is 0.000000. Given that the probability value is $\alpha < 5\%$, these results demonstrate that the data are not regularly distributed. However, the normality test results, which are generally not distributed, can be justified by assuming the Central Limit Theorem. 299 firms throughout a 5-year period from 2017 to 2021 were utilized as the sample data, so there were 1495 observations in total. Therefore, the distribution in this study may be considered abnormal, so that it is following Berenson et al. (2012), the results of the normality test can be ignored.

The next test is the multicollinearity test, as shown in Table 3 below. The data shows no one has a high value for each independent variable (higher than 0.5 or lower than -0.5). Therefore, the study results are free from multicollinearity.

Table 3.
Multicollinearity Test Results

	FMO	IO	CONC	ROA	DER	SIZE	AGE	FCF	VOL
FMO	1.000000	-0.034705	0.045065	0.050334	-0.057979	-0.081925	-0.011863	0.028656	-0.051913
IO	-0.034705	1.000000	0.314865	0.035300	-0.002283	0.034845	-0.034142	0.043023	-0.136518
CONC	0.045065	0.314865	1.000000	-0.008717	-0.033168	-0.256106	0.032415	0.031273	-0.089524
ROA	0.050334	0.035300	-0.008717	1.000000	-0.142502	0.155176	0.100605	0.426974	0.095906
DER	-0.057979	-0.002283	-0.033168	-0.142502	1.000000	0.063750	-0.043974	-0.047353	0.073968
SIZE	-0.081925	0.034845	-0.256106	0.155176	0.063750	1.000000	0.111330	0.108154	0.410039
AGE	-0.011863	-0.034142	0.032415	0.100605	-0.043974	0.111330	1.000000	0.157403	0.051314
FCF	0.028656	0.043023	0.031273	0.426974	-0.047353	0.108154	0.157403	1.000000	0.086187
VOL	-0.051913	-0.136518	-0.089524	0.095906	0.073968	0.410039	0.051314	0.086187	1.000000

The Chow and Hausman tests were then performed to establish the regression model utilized. The test findings in Table 4 revealed that the cross-section F - 0.0000 in the Chow test had a value less than 0.05, implying that H0 was rejected with a 95% confidence level, so the fixed effect model was the best model employed. According to the Hausman Test, the cross-section has a probability value of 0.0184, which means it has a value of less than 0.05. Therefore, H0 is rejected with a confidence level of 95%, a good model used in research is the fixed effect.

Table 4.
Chow Test Results and Hausman Test

Chow Test Results			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	3.217857	(298,1187)	0.0000
Cross-section Chi-square	885.249169	298	0.0000
Hausman Test Results			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	19.918502	9	0.0184

The Chow Test and Hausman Test results reveals that the fixed effect model was applied. However, in this study, heteroscedasticity was found, so weighting was used to overcome this by using the cross weight on the GLS weigh and the white cross-section on the coefficient covariance method. Table 5 below discover the regression test results.

From these results (Table 5), it was found that family ownership and institutional ownership have a significant negative relationship with dividend yield. Meanwhile, the last independent variable namely concentration ownership has a significant positive relationship with the dividend yield.

The control variable found that the return on assets, firm size, firm age, free cash flow and the volatility (business risk) have a significant positive relationship with the dividend yield, while debt-to-equity ratio is insignificant.

Table 5.
Regression Test Results

Variable	Coefficient	Prob.	Hypothesis
C	-0.016757	0.1775	
FMO	-0.005236	0.0013***	+
IO	-0.005284	0.0000***	+
CONC	0.008681	0.0000***	+
ROA	0.025346	0.0000***	+
DER	-3.94E-05	0.2229	-
SIZE	0.001009	0.0231**	+
AGE	0.000153	0.0000***	+
FCF	0.002899	0.0000***	+
VOL	3.43E-16	0.0006***	+
<i>Effect Specification</i>			
R-squared	0.881911	Mean dependent var	0.045592
Adjusted R-squared	0.851369	S.D. dependent var	0.071984
S.E. of regression	0.031430	Sum squared resid	1.172547
F-statistic	28.87536	Durbin-Watson stat	2.263265
Prob(F-statistic)			0.000000

Description : ** significance 5%, ***significance 1%

In the regression results, the adjusted R2 value is 0.851369. This value indicates that changes in the dividend yield well described by family ownership, institutional ownership, concentration ownership, return on assets, debt-to-equity ratio, company size, company age, free cash flow, and volatility (business risk) of 85.13%. Comparatively, the remaining 14.87% is explained by other factors not examined.

Discussion

Negative significant relationship between family ownership and the dividend policy is align with Reyna (2017) who states that according to agency theory, dividends are no longer needed as a control mechanism because concentrated ownership, such as family ownership, has been able to oversee company activities, thereby reducing agency conflicts in companies. In addition, in the study of Duygun et al. (2018), companies with family ownership will maintain revenue from the company for internal financing and avoid using external funding to protect ownership and control.

Institutional ownership has a negative and significant relationship to dividend policy, and this is align with Hasan et al. (2023), which found that institutional ownership will pay lower dividends because companies with institutional ownership certainly have their income, so ownership will try to avoid taxes by not paying dividends. In addition, the company's low dividend payout is also due to institutional ownership, which tends to use the income earned to be reinvested for growing the company in the future. This is consistent with Asali et al. (2020) that a tax preference theory makes companies with institutional ownership pay low dividends.

Concentration ownership has a positive and significant value to dividend policy. The descriptive table shows that the concentration ownership of the 1495 data has a minimum value of 12.83%. This condition indicates that all companies in Indonesia have concentrated ownership. Therefore, this ownership shows that the greater the concentration ownership, the greater the ability of these shareholders to encourage management to pay dividends. This aligns with research conducted by Setiawan et al. (2016) that concentration ownership has a positive and significant relationship to dividend policy. This is because concentration ownership has interests in line with minority shareholders. These results are consistent with Khan (2022), which found that concentration ownership also has a positive and significant relationship to dividend policy because the majority shareholders have voting rights to encourage management to pay high dividends. This can reduce the agency problem in the company and help minority shareholders maintain their investment.

Return on assets has a positive and significant value to the dividend policy. These results align with Valentina et al. (2022) that return on assets has a positive relationship with dividend policy because the more significant the profitability obtained by the company, the more the company tends to pay enormous dividends. These results are also consistent with Sutanto et al. (2018) and Wirata et al. (2017) that when a company's return on assets is high, it will make the company have excess funds that can be used to pay dividends.

The debt-to-equity ratio has a negative value and is unrelated to the dividend policy. The descriptive table shows that the mean value of DER is 1.42%, which indicates that the average non-financial company in Indonesia has a high DER value. However, this value will allow the company to distribute dividends because dividends are rights that shareholders must receive. This result is in line with Ginting (2018) research that debt does not significantly affect dividend policy because a high amount of debt to companies will not prevent companies from paying dividends. After all, companies must also be able to pay attention to the shareholders. In addition, debt also does not affect dividend distribution by the company because if the company has paid its debt and has an adequate amount of free cash flow, it can still distribute dividends to investors.

Firm size has a positive and significant value on dividend policy. The results of this study are align with those conducted by Murhadi (2010), that company size has a positive and significant effect on dividend policy for several reasons, first is that if a company has a large size, of course, its net profit

will also be more significant than a company with small size, is that if a company has a large size, of course, its net profit will also be greater than that of the company, which are still small in size.

Firm age has a positive and significant value towards the dividend policy that companies that have reached the mature stage will pay more dividends. This is supported by Mehdi et al. (2017). Companies already in the mature stage no longer want to make investments aimed at company growth in the future, so these funds will be used for dividend payments. In addition, companies that have reached maturity will have more significant agency problems because they have a spread of ownership, so monitoring, additional controls, and higher dividend payments are needed.

Free cash flow has a positive and significant value to the dividend policy. The results of this study align with Wulandari et al. (2019) that free cash flow has a positive and significant effect on dividend yields because when a company has free cash flow, it will make the existing management of the company pay dividends to reduce agency problems. These results are also consistent with Gunawan et al. (2019) that large free cash flows will tend to increase agency problems, so it is necessary to distribute dividends as a control mechanism to reduce this.

Volatility (business risk) has a positive and significant value on dividend policy. These results align with Reyna (2017), who found that business risk, as measured by volatility, has a significant and positive effect on dividend policy. This is also in line with Ahmad et al. (2016) that risk in business will make the company's income uncertain, but the company will still distribute dividends even though there are business risks; this condition is based on a bird in the hand theory. This theory is that investors will prefer cash dividends over returns on investment. This is because cash dividends help reduce the risk of uncertainty faced by investors in the company. In addition, according to Jensen & Meckling (1976) that with, an increase in company risk will cause investors to have expectations of a high rate of return to be obtained, or it can be concluded that there is a high risk, high return in investment so that the risk of the company will affect positively on the company's dividend policy.

CONCLUSION

According to current research, family ownership and institutional ownership have a negative and significant influence on dividend policy. These findings support the existence of a substitution theory in agency theory, demonstrating that it may be used as a control mechanism to reduce agency problems with good corporate governance. Different results were found on the concentration ownership variable, which positively and significantly influences dividend policy. It supports the outcome theory so that it can also be concluded that companies with concentration ownership will have interests that align with minority shareholders to maintain the value of their investments. Furthermore, with the exception of the variable debt-to-equity ratio, the findings of the control variables are positive and significant. These variables include return on assets, company size, age, free cash flow, and volatility (business risk). From these results, there is an influence of outcome theory to reduce agency problems in companies by distributing dividends as a control mechanism. From the results of this study, there are still some shortcomings are developed for capital markets in Asia with emerging capital market characteristics and raised corporate social issues that are being discussed as corporate sustainability factors in relation to the dividend yield value.

MANAGERIAL IMPLICATIONS

Companies that have a concentration ownership structure have voting rights that can encourage management to make dividend payments as wa mechanism to reduce agency problems. This is done because concentration ownership has interests that are in line with minority shareholders to secure the value of the company's investment. For investors, it is more profitable to invest in companies with concentration ownership structures because they provide greater dividends and reduce uncertainty.

In this case, the manager must be able to increase return on assets and free cash flow to maintain dividend payments. Mature companies with large sizes and ages can prioritize dividend payments because the average company faces a larger agency problem, so dividends are used as a control mechanism to reduce agency problems that occur. In addition, companies that have high business risk volatility should distribute dividends in order to still provide a sense of security to investors.

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