

# **Determinants of Dividend Policy of Family Firms in Indonesia**

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## **Abstract**

This study aims to determine the effect of firm growth, leverage, profitability, institutional ownership, board size, and inflation variables on dividend policy. The object of this research is family firms classified as manufacturing firms on the Indonesia Stock Exchange (IDX) in 2017-2020. Selected by purposive random sampling technique, the study used 144 samples from 36 family firms that met the criteria. Panel data regression results showed that, partially, leverage has a negative and significant effect on dividend policy while profitability has a positive and significant effect. Furthermore, firm growth, inflation, institutional ownership, and board size have no significant effect on dividend policy. The implication is that if investors want to choose firms that pay out high dividends, they must choose firms with low leverage and high profitability. Firms must be able to try to have lower leverage and continue to generate high profits to be able to distribute dividends.

## **Keywords**

Corporate Governance, Dividend Policy, Family Firm, Inflation, and Performance.

## **1. Introduction**

Manufacturing is a business sector that runs its production using modern machinery and equipment, as well as human resources in developing commodity materials that have value for resale. The manufacturing industry consists of several sectors, namely the basic and chemical industrial sector, the various industrial sector, and the consumer goods industrial sector. According to the Central Statistics Agency (BPS – *Badan Pusat Statistik*) (2022), the distribution of the Gross Domestic Product (GDP) of the manufacturing industry for four consecutive years was 20.16% in 2017, then decreased to 19.86% in 2018. In 2019, the contribution of the manufacturing industry was 19.70%, then increased in 2020 to 19.87%. The manufacturing industry provides the largest contribution to GDP, which can accelerate the growth of the national economy to increase the value of investment and export activities.

According to PwC (2014) in Kristanti et al. (2019), family firms occupied more than 95% of firms in Indonesia. This refers to the involvement of the family in management positions. Out of all the family firms, the manufacturing sector dominates by 50%. According to Alderson (2018), a firm is considered a family firm when a family member is a chief executive and there are at least two generations of family control with at least 5% of the voting shares held by the family or related interests. Additionally, Drake (2009) state that family firms are defined as share ownership by individuals or families with no less or more than 25% of the voting rights and the rest is owned by small shareholders. According to Daily and Dollinger (1992), the involvement of family members in the board or the highest leader is characterized by two or more family members with the same last name. The manufacturing sector has 156 firms in the 2017-2020 period, which includes family firms. Based on the definition of Daily and Dollinger (1992) and Drake (2009), family firms that are classified as manufacturing firms are 93 firms.

Family firms need to run on optimal firm governance performance to reduce expropriation. This is important for shareholders because it can provide accurate, correct, and up-to-date information in distributing dividends (Rajput and Jhunjhunwala, 2019). According to Kristanti et al. (2019), family firms involve owners, board of directors, family CEOs, and family managers. In other words, most family firms have family members as the main stakeholder. Therefore, there is a conflict of interest between the family owner as the majority shareholder and the public as the minority shareholder.

Dividends are profits in the form of cash and shares distributed by the firm that can be done every semester or every year. In contrast to capital gains, where the income is uncertain, dividends are relatively certain, especially if we choose a firm with good fundamentals, such as a family firm classified as a manufacturing firm. Dividend distribution is preferred by shareholders because it is a guaranteed income (Brigham and Houston 2014; Guttman et al. 2010). Dividend policy is the distribution of profits paid to shareholders. Payments of earnings and/or retained earnings are used to fund future investments

Agency theory is a conflict of interest between capital owners/shareholders (principals) and managers who assist in the firm's activities (agents) (Jensen and Meckling 1976). Agency problem type II is another agency problem due to conflict between the majority (agent) and minority (principal) shareholders (Setiawan et al. 2019). Agency problem type II is caused by the interest of the majority shareholder in maintaining control that is considered to be expropriating the wealth of the minority shareholder. Decisions on personal interests will drain the firm's funds, thereby harming minority shareholders because the dividends received are lower (Isakov and Weisskopf 2015).

Firm profits can lead to abuse of power by the majority shareholder over dividend policy (Pindado et al. 2012). Based on Figure 1, the Dividend Payout Ratio (DPR) in family firms classified as manufacturing firms fluctuated from 2017 to 2020. In 2019, the average dividend payout ratio decreased from the previous year, which was 18.30%. Looking at the financial statements of family firms classified as manufacturing firms, some firms have negative retained earnings and no net income for the last financial year, so the Annual General Meeting of Shareholders (AGM) decided not to distribute dividends to shareholders. However, several family firms classified as manufacturing firms in 2019 had positive retained earnings but still did not distribute dividends because the profits were used for business continuity. In 2020, there was an increase in the average dividend ratio, even though the internal conditions of firms were affected by the COVID-19 pandemic. The distribution of dividends by the majority shareholder can protect against expropriation against minority shareholders. Lower dividend ratios tend to do this (Hasan et al. 2021). The phenomenon that occurs in family firms needs to be studied, especially regarding various policies that can affect investors. This is because the dividend policy is controlled by family members as the majority shareholder who has control rights in various decisions for their interests.

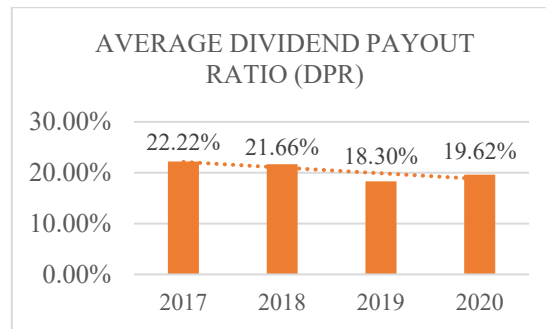


Figure 1. Average Dividend Payout Ratio (DPR) in Family Firms

There have been relatively few studies on dividend policy in family firms in Indonesia. Kristanti et al. (2019), by examining family firms belonging to the Kompas 100 stock index in 2013-2016, found that cash holding, firm size, leverage, and profitability in family firms have a significant and negative effect on dividend policy, and firm size has no significant effect on dividend policy. In addition, Atmaja (2016) examined public firms in 2002-2009 and found that family control has a negative effect on dividend payments. On dividend policy in family firms in 2012-2017 in Turkey, Kilincarslan (2021) found a positive effect of board size, audit committee, and board independence; a negative effect of family director; and an insignificant effect of CEO. Another study by Bataineh (2021) in Jordan

on the industrial and service sectors in 2014-2017 found evidence that firms have a highly concentrated ownership structure and are mainly dominated by families followed by financial institutions and foreign investors, while the state showed relatively lower ownership. Furthermore, Wu et al. (2020) found evidence of good corporate governance and firm value for dividend payments in their research in Taiwan on high-tech, financial, and traditional industrial sector firms in 2008-2012. Meanwhile, Boshnak (2021) proved that there is a positive relationship between the tendency to pay dividends and the frequency of board meetings, institutional ownership, profitability, and firm age. Meanwhile, the level of board independence, board size, and leverage showed a negative effect. Additionally, there was no evidence that family ownership has any effect on policy dividend payouts in Saudi firms.

Previous research shows that there are still gaps in terms of firm growth, leverage, profitability, institutional ownership, firm governance, and macroeconomics in family firms, especially in Indonesia. This gap is important to fill because dividend policy in larger family firms is controlled by family members as majority shareholders who have control rights in various decisions for their benefit. The purpose of this study is to identify the effect of the independent variables, namely firm growth, leverage, profitability, institutional ownership, board size, and inflation on the dependent variable, namely dividend policy in family firms classified as manufacturing firms in the Indonesia Stock Exchange (IDX) in 2017-2020. The results of this study are expected to contribute to the knowledge of corporate finance, firms, and investors and potential investors, especially in terms of dividend policy in family firms classified as manufacturing firms in Indonesia.

### **1.1 Objectives**

Previous research on the factors that affect dividend policy still has mixed results. Therefore, this study aims at identifying whether firm growth, leverage, profitability, institutional ownership, board size, and inflation have a simultaneous and partial effect on dividend policy in family firms classified as manufacturing firms on the Indonesia Stock Exchange (IDX) in 2017- 2020.

## **2. Literature Review**

### **2.1 Agency Theory**

Villalonga and Amit (2006) introduce two types of agency problems, namely agency problem type I, which involves the separation of control between shareholders and firm management as described by Jensen and Meckling (Jensen and Meckling 1976), and agency problem type II, namely conflicting relationships between majority and minority shareholders. Dividend payments at family firms can be associated with agency problem type II (Setiawan et al. 2019). In particular, the opportunistic behavior of family members as the majority shareholder to prioritize the prosperity of the owner by ignoring other priorities (Sheikh et al. 2021).

### **2.2 Family Firm**

According to Daily and Dollinger (1992), the involvement of family members in the board or the highest leader is characterized by two or more family members with the same last name. Furthermore, Drake (2009) states that family firms are defined as share ownership by individuals or families with no less or more than 25% of the voting rights and the rest is owned by small shareholders. Family firms have different priorities than non-family firms. According to Villalonga and Amit (2006), family ownership has more than 20% voting rights as the majority shareholder. Moreover, according to Alderson (2018), family firms are more likely to pay attention to stability and sustainable family ownership.

### **2.3 Dividend Policy**

Dividend policy is an important decision made by firms' board of directors in determining the firms' funding allocation and the amount of cash dividends to be distributed (Titman et al. 2017). In other words, dividend policy governs the distribution of profits in the form of cash and shares paid to shareholders. Payments of earnings and/or retained earnings are used to fund future investments. Dividend payout ratio is the amount of net profit to be distributed to shareholders for investment needs. Capital gains are uncertain income, so they are riskier than dividends. This is because the value of the shares sold does not match the desired predictions from shareholders (Brigham and Houston, 2014; Guttman et al. 2010).

## **2.4 Firm Growth**

Firm growth can be seen from firm assets as an effort to improve the sustainability of firm life. Increasing firm growth assets require substantial funds in the future, so managers prefer to hold profits into internal funds and use these funds to invest in profitable projects rather than distributing dividends to shareholders (Wahjudi, 2020). Research by Wahjudi (2020) found that firm growth has a significant and negative effect on dividend policy. On this topic, the hypothesis is:

H1: Firm growth has a significant and negative effect on dividend policy.

## **2.5 Leverage**

The Debt to Equity Ratio (DER) reflects the firm's ability to meet all of its obligations and shows how much capital is used to pay off their debts by showing how much capital is used to pay the debts (Kristanti et al., 2019). The higher the DER, the greater the fulfillment of obligations by the firm. Meanwhile, the lower the DER, the better their funding needs can be met with their capital. Firm profits will be reduced on high liability payments, thus affecting dividend payments. This is because firms with high debt are required to pay transaction costs including principal and interest payments (Kristanti et al., 2019; Wahjudi, 2020). Research by Wahjudi (2020) and Kristanti et al. (2019) found that leverage has a significant and negative effect on dividend policy. On this topic, the hypothesis is:

H2: Leverage has a significant and negative effect on dividend policy.

## **2.6 Profitability**

Profitability is a firm's net profit from its operational activities. According to Weygandt et al. (2019), profitability ratios are used to measure firms in achieving revenue or success in their operational activities for a certain time or period. The higher a firm's Return on Equity (ROE) ratio, the higher the dividends paid. The ROE ratio shows how well a firm can manage its equity capital and measures the level of profit from investments made by the firm's shareholders. Moreover, dividends are obtained from a portion of the firm's net profit, so the dividends will be paid to shareholders if the firm makes a profit. Research by Wijaya et al. (2021) and Jati (2020) found that profitability has a positive effect on dividend policy. On this topic, the hypothesis is:

H3: Profitability has a significant and positive effect on dividend policy.

## **2.7 Institutional Ownership**

Institutional ownership is the ownership of firm shares by investors in the form of institutions or legal entities; be it banks, stockbrokers or other investment advisors, mutual funds, insurance firms, or pension funds (Ayers and Freeman, 2003). Institutional ownership oversight encourages dividend payments that can minimize the risk of opportunistic behavior from managers by prioritizing shareholder prosperity (Boshnak, 2021). Supervision efforts carried out by institutional ownership can be effective in paying dividends. The high dividend payout is influenced by the high institutional ownership of the firm's management. With this increase, institutional shareholders are considered professionals who can reduce agency conflicts due to the separation between managers and shareholders, thus considering the needs of other firms related to the utilization of investment opportunities (Bataineh, 2021; Khan, 2021). Research by Bataineh (2021) and Khan (2021) found that institutional ownership has a significant and positive effect on dividend policy. On this topic, the hypothesis is:

H4: Institutional ownership has a significant and positive effect on dividend policy.

## **2.8 Board Size**

According to Financial Services Authority Regulation Number 73/POJK.05/2016, corporate governance is the structure and process used and implemented by firm organs to improve the achievement of business goals and optimize firm value for all stakeholders, especially policyholders, the insured, participants, and/or parties who are entitled to benefits in an accountable manner and based on laws and regulations and ethical values. The principles of good corporate governance include transparency, accountability, responsibility, independence, and fairness. Optimal firm governance can regulate firm management so that it will increase the firm's growth value both in the capital market and the economy (Pasricha and Chauhan 2009).

Board size is the number of boards of directors and commissioners in a firm (Kulathunga 2017). Based on the

Financial Services Authority (OJK – *Otoritas Jasa Keuangan*) Regulation Number 33 of 2014 concerning the Board of Directors and Board of Commissioners of Issuers or Public Firms, it is explained that there are at least two members of the board of commissioners in a firm, one of whom is an independent commissioner. The higher the number of the board of commissioners, the more it is expected to carry out better oversight of the board of directors. The board of directors plays an important role in monitoring the executive management, thereby reducing agency problems. This role limits the power of controlling shareholders such as families who have the ability and motivation to take over from minority shareholders. Thus, a larger board size will encourage higher dividend payouts because it has greater expertise and diversity of specializations, which can increase monitoring and supervision in the capital market more effectively (Khan 2021; Kilincarslan 2021; Tahir et al. 2020). Research by Kilincarslan (2021), Khan (2021), and Tahir et al. (2020) found that board size has a significant and positive effect on dividend policy. On this topic, the hypothesis is:

H5: Board size has a significant and positive effect on dividend policy.

## **2.9 Inflation**

According to Case et al. (2017), macroeconomics is general economic changes that affect producers and consumers when using goods or services. Macroeconomics studies the factors that determine the state of production of a country. This study uses macroeconomic variables that include inflation. Inflation is an increase in prices in general and continuously over a certain period of time (Mankiw 2018). The price increase is measured based on the price index. Research on the relationship between inflation and dividend policy conducted by Basse and Reddemann (2011) found that higher inflation is the main driver of dividend payments. Inflation has an important role in firms' decision to distribute dividends depending on the state of profit or loss (Mirbagherijam 2014). The higher the inflation rate, the higher the prices of raw materials, hence reducing profit. This means that firms are more concerned with their internal funds to finance their operations, and this will reduce the dividends to be distributed. Research by Brahmaiah et al. (2018) found that inflation has a negative and significant effect on dividend policy. On this topic, the hypothesis is:

H6: Inflation has a significant and negative effect on dividend policy.

## **3. Methods**

This study used secondary data, namely the financial statements of family firms classified as manufacturing firms that have been audited for four years in the 2017-2020 period. The population includes 93 family firms classified as manufacturing firms. The sampling technique used was purposive sampling with the criteria of family firms that distributes dividends during the study period. In addition, the firms must have complete research data during the research period. As a result, 144 samples consisting of 36 firms during the four-year research period from 2017-2020 were obtained. The model used in this study was panel data regression as follows:

$$DPR = \alpha + \beta_1 GROWTH_{i,t} + \beta_2 DER_{i,t} + \beta_3 ROE_{i,t} + \beta_4 INSOWN_{i,t} + \beta_5 BSIZE_{i,t} + \beta_6 INF_{i,t} + \varepsilon$$

Where the DPR is a dividend policy measured by a dividend payout ratio proxy by comparing cash dividends per share with net income per share; GROWTH is the total assets of the current year minus the total assets of the previous year compared to the total assets of the previous year; DER is measured by debt to equity ratio proxy by comparing total liabilities with total equity; ROE is; INSOWN is institutional ownership that is measured by comparing the number of shares held by the institution with the number of outstanding shares; BSIZE is the size of the board using the logarithm of the total board of commissioners; INF is inflation; alpha is a constant;  $\beta_1$ ,  $\beta_2$ ,  $\beta_3$ ,  $\beta_4$ ,  $\beta_5$ , and  $\beta_6$  are the regression coefficients of each independent variable;  $i$  is firm,  $t$  is time, and  $\varepsilon$  is error term.

## **4. Data Collection**

This study is a quantitative study using secondary data in the form of financial and annual reports for all the family firms classified as manufacturing firms on the Indonesia Stock Exchange (IDX) for the 2017-2020 period. The financial statements used were audited financial statements obtained through the Indonesia Stock Exchange (IDX) website [www.idx.co.id](http://www.idx.co.id) and the firms' official websites.

## 5. Results and Discussion

Data were analyzed quantitatively using descriptive statistical calculation techniques. The analytical method used was panel data regression analysis and the data processing was carried out using EViews 10.

### 5.1 Numerical Results

Table 1. Descriptive Statistics

Variables	N	Minimum	Maximum	Mean	Std. Dev.
Dividen Payout Ratio (DPR)	144	-1.97301	4.014828	0.431696	0.519239
Firm Growth (GROWTH)	144	-0.88582	1.676057	0.112842	0.233228
Debt to Equity Ratio (DER)	144	0.090589	3.750990	0.763978	0.639967
Return On Equity (ROE)	144	-0.06455	2.244585	0.171560	0.280998
Institutional Ownership (INSOWN)	144	0.139780	0.997110	0.716330	0.180932
Board Size (BSIZE)	144	0.690000	2.480000	1.387000	0.479140
Inflation (INF)	144	0.016800	0.036100	0.027850	0.007140

Table 1 presents that the average value of dividend policy proxied by the DPR is 0.431696, which is smaller than the standard deviation value of 0.519239. This shows that the data on the dividend payout ratio varies or is not clustered. PT Chitose International Tbk. had the largest dividend ratio in 2020, which was 4.014828. Meanwhile, PT Astra Otoparts Tbk. had the lowest value in 2020, which was -1.97301.

Firm growth has an average value of 0.112842, which is smaller than the standard deviation of 0.233228. This means that firm growth varies or is not clustered. PT Indofood CBP Sukses Makmur Tbk. had the largest firm growth value in 2020, which was 1.676057 or asset ownership of Rp103.588.325.000.000. Meanwhile, PT Indospring Tbk. had the lowest value in 2019, which was -0.88582 or asset ownership of around Rp283.442.241.208.

Leverage has an average value proxied by DER of 0.763978, which is greater than the standard deviation of 0.639967. This means that leverage does not vary or is clustered. PT Indomobil Sukses Internasional Tbk. had the largest DER in 2020, which was 3.750990. Meanwhile, PT Industri Jamu dan Farmasi Sido Tbk. had the lowest DER in 2017, which was 0.090589.

Profitability has an average value proxied by ROE of 0.171560, which is smaller than the standard deviation of 0.280998. This means that the profitability value varies or is not clustered. PT Merck Indonesia Tbk. had the largest ROE in 2018, which was 2,244585. Meanwhile, PT Trisula Textile Industries Tbk. had the lowest DER in 2020, which was -0.06455.

Institutional ownership has an average value of 0.716330, which is greater than the standard deviation of 0.180932. This means that the value of institutional ownership does not vary or is clustered. PT Fajar Surya Wisesa Tbk. had the largest institutional ownership from 2019 to 2020, which was 0.997110. Meanwhile, PT Arwana Citramulia Tbk. had the lowest institutional ownership in a row for three years from 2017 to 2019, which was 0.139780.

Board size has an average value of 1.387000, which is smaller than the standard deviation value of 0.479140. This means that the board size value varies or is not clustered. PT Astra International Tbk. had the largest board size in 2020, which was 2.480000. Meanwhile, the lowest board independence of 0.690000 was found at PT Ekadharmas International Tbk., Impack Pratama Industri Tbk., Selamat Sempurna Tbk. for three consecutive years from 2017 to 2019; PT Panca Budi Idaman Tbk. from 2017 to 2018 and 2020; PT Merck Indonesia Tbk; PT Chitose International Tbk. from 2018 to 2020; and PT Hartadinata Abadi Tbk. from 2017 to 2018.

Inflation has an average value of 0.027850, which is greater than the standard deviation of 0.007140. This means that the inflation rate does not vary or is clustered. The lowest inflation was 1.68% in 2020. Meanwhile, the largest inflation was 3.61% in 2017. These inflations are still categorized as mild inflation rates because they are less than 10% per year.

Table 2. Classic Assumption Test

Assumption	Test	Characteristics	Criteria	Research result
Heteroscedasticity test	Breuch-Pagan test	Sig. 0.1182	Sig > 0.05	Asumption fulfilled
Multicollinearity test	Variance Inflation Factor (VIF)	VIF GROWTH = 1.0351 VIF DER = 1.4329 VIF ROE = 1.1910 VIF INSOWN = 1.1138 VIF BSIZE = 1.2362 VIF INF = 1.0185	VIF < 10	Asumption fulfilled

Based on Table 2, the classic assumption test is aimed to identify whether or not the model meets the requirement to validate the estimation and is not biased, or abiding by the BLUE (Best Linear Unbiased Estimator) requirements. In this study, the heteroscedasticity test was conducted by utilizing Breuch-Pagan test to acquire Chi-Square value at  $obs \cdot R\text{-Squared}$  more than 0.05, meaning that there was no heteroscedasticity indication in the data or no variance similarity in the regression model residual. The Variance Inflation Factor (VIF) used in the multicollinearity test (company growth, leverage, profitability, institutional ownership, board size, and inflation) did not exceed the value of 10. This means that there is no indication of multicollinearity in this study or there is no correlation between independent variables. The following (Table 3.) are the results of panel data regression testing:

Table 3. Results of Panel Data Regression

	Prob.	Prob. (F-Statistic)	Cross Section	R-Squared	Coefficient
<b>Chow Test</b>	*0.0000	-	-	-	-
<b>Hausman Test</b>	*0.1815	-	-	-	-
<b>Lagrange Multiplier Test</b>	*0.0038				
<b>Simultaneous Test</b>		*0.049226		0.086900	
<b>Paired t Test</b>	-	-	-	-	-
C	*0.2503				0.378451
Growth	*0.1804				-0.228353
Debt to Equity Ratio	*0.0340				-0.197581
Return On Equity	*0.0019				0.560304
Institutional Ownership	*0.9755				0.009207
Board Size	*0.2192				0.142811
Inflation	*0.6210				-2.543601

Based on the results of the Chow test in Table 3, the probability (Cross-section F) is 0.0000, which is less than 0.05. This indicates that the most appropriate model to be used in this study is based on the Chow was Fixed Effect Model test. Furthermore, the Hausman test in Table 3 results in a random cross-section probability value of 0.1815, which is greater than 0.05. This indicates that the most appropriate model to be used in this study is based on the Hausman Test was the Random Effect Model (REM). Moreover, the Lagrange Multiplier test results in the Breusch-Pagan Cross-sectional Probability value of 0.0038, which is smaller than 0.05. The results of this test indicate that the most appropriate model to be used in this research was the Random Effect Model (REM).

Based on Table 3, the result of the calculation of the coefficient of determination ( $R^2$ ) on the R-squared value is 0.0869, which is about 8.69%. This value indicates that firm growth, leverage, profitability, institutional ownership, board

size, and inflation can explain the dividend policy by 8.67%, while the remaining 0.9131 or 91.31% is explained by other variables outside the study. The result of the simultaneous test of the probability value (F-statistic) is  $0.049226 < \alpha = 0.05$ . This indicates that all independent variables simultaneously affect dividend policy as the dependent variable.

The results of partial hypothesis testing (t-test) used the t-count with a significance level of 0.05. Based on Table 3, the regression equation is obtained as follows:

$$DPR = 0.378451 - 0.228353 (GROWTH) - 0.197581 (DER) + 0.560304 (ROE) + 0.009207 (INSOWN) + 0.142811 (BSIZE) - 2.543601 (INF) + \epsilon$$

The constant coefficient value (C) of 0.378451 indicates that if firm growth, leverage, profitability, institutional ownership, board size, and inflation are zero or constant, the DPR value is 0.378451. Firm growth regression coefficient value is -0.228353 with a probability level of  $0.1804 > \alpha = 0.05$ . This means that H1 is rejected, i.e. firm growth has a negative but insignificant effect on dividend policy. Leverage regression coefficient value is -0.197581 with a probability level of  $0.0340 < \alpha = 0.05$ . This means that H2 is accepted, i.e. leverage partially has a significant and negative effect on dividend policy. Profitability regression coefficient value is 0.560304 with a probability level of  $0.0019 < \alpha = 0.05$ . This means that H3 is accepted, i.e. profitability has a partial positive and significant effect on dividend policy. The institutional ownership regression coefficient is 0.009207 with a probability level of  $0.9755 > \alpha = 0.05$ . This means that H4 is rejected, i.e. institutional ownership has no significant and positive effect on dividend policy. Board size regression coefficient value is 0.142811 with a probability level of  $0.2192 > \alpha = 0.05$ . This means that H5 is rejected, i.e. board size has no significant and positive effect on dividend policy. Inflation regression coefficient value is -2.543601 with a probability level of  $0.6210 > \alpha = 0.05$ . This means that H6 is rejected, i.e. inflation partially has no significant and negative effect on dividend policy.

## **5.2 Validation**

### **5.2.1 The Effect of Firm Growth on Dividend Policy**

The test results showed that firm growth has a negative but insignificant effect on dividend policy, so hypothesis H1 is rejected. This means that the greater the growth rate of a firm, the smaller the dividend distribution will be. This condition may occur because the firms hold profits in internal funds and use these funds to invest in profitable projects rather than distributing dividends to shareholders. Firms that are rising and have good performance will need substantial funds in the future. This is indicated by the increase in their growth assets. This finding is in line with previous research Widyawati and Indriani (2019) who found that firm growth has negative and insignificant effect on dividend policy. However, it contradicts Atmaja (2016) who found that firm growth has a significant and positive effect on dividend policy and Wahjudi (2020) who found that firm growth has a significant and negative effect on dividend policy.

### **5.2.2 The Effect of Leverage on Dividend Policy**

The test results showed that leverage has a significant and negative effect on dividend policy, so hypothesis H2 is accepted. This proves that the higher the DER, the smaller the dividend payment. This occurs in family firms because the fulfillment of their obligations is getting higher due to their substantial asset growth. The high profits generated by the firms are used to finance their operations and the obligation to pay principal and interest payments. In addition, the firms can also benefit from tax shields because high-interest payments on loans can reduce the imposition of low taxes (Wahjudi, 2020). This finding is in line with Wahjudi (2020) and Kristanti et al. (2019) who found that leverage has a negative effect on dividend policy. However, it is inconsistent with Pattiruhu and Paais (2020) who found that leverage has a significant and positive effect on dividend policy.

### **5.2.3 The Effect of Profitability on Dividend Policy**

The test results showed that profitability, as measured by ROE, has a positive and significant effect on dividend policy. This means that the hypothesis is accepted. The positive direction indicates that high dividend payouts are affected by high profitability as well. This happens because the firms can manage their equity capital from net income and measure the level of return on investments made by their shareholders. So, the firms will distribute dividends if they make a profit. This finding is in line with Wijaya et al. (2021) and Jati (2020) who found that profitability has a positive effect on dividend policy.



#### **5.2.4 The Effect of Institutional Ownership on Dividend Policy**

The test results showed that institutional ownership has no significant and positive effect on dividend policy, so H4 is rejected. This proves that the larger the institutional shareholders, the greater the dividends paid. The involvement of institutional investors can direct managers and family shareholders in making strategic firm decisions on the use of cash allocations from profits. This can happen because the high profits generated by the firms are reinvested in expansion, which is expected to increase share prices, thereby increasing the profits of majority and minority shareholders. This finding supports Nguyen and Li (2020) who found that institutional ownership has an insignificant effect on dividend policy. However, it is not in line with Bataineh (2021) and Khan (2021) who found that institutional ownership has a positive and significant effect on dividend policy.

#### **5.2.5 The Effect of Board Size on Dividend Policy**

The test results showed that board size has no significant and positive effect on dividend policy. This means that hypothesis H5 is rejected. The positive direction indicates that the larger the size of the firms' board of commissioners, the higher the dividend payout. This reflects the effective oversight of the board of commissioners to encourage higher dividend payouts. This could be because the number of expertise and the diversity of specializations of the board of commissioners in family firms is greater so that monitoring and supervision in the capital market coordinate effectively. This finding is not in line with Kilincarslan (2021), Khan (2021), and Tahir et al. (2020) who found that board size has a positive effect on dividend policy.

#### **5.2.6 The Effect of Inflation on Dividend Policy**

The test results showed that inflation has no significant and negative effect on dividend policy. This means that hypothesis H6 is rejected. With higher inflation, the operating prices of firms continue to increase. Thus, firms are more concerned with their internal funds to finance operations, hence the effect on the smaller dividends to be distributed. This finding is in line with Alkhatib (2020) who found that inflation has no significant and negative effect on dividend policy. However, it is contrary to Brahmaiah et al. (2018) who found that inflation has a negative and significant effect on dividend policy.

### **6. Conclusion**

This study examines the effect of firm growth, leverage, profitability, institutional ownership, board size, and inflation on dividend policy in family firms classified as manufacturing firms in Indonesia in 2017-2020. Statistical test results showed that, simultaneously, firm growth, leverage, profitability, institutional ownership, board size, and inflation have an effect on dividend policy. Partially, leverage has a significant and negative effect on dividend policy and profitability has a significant and positive effect on dividend policy. Furthermore, firm growth and inflation have no significant and negative effect on dividend policy. Meanwhile, institutional ownership and board size have no positive effect on dividend policy.

The results of this study are expected to be beneficial for firms and investors. Firms that distribute low dividends need to pay attention to the interests of capital owners with the right level of leverage ratio for the use of profits for debt payments and dividend distribution. In this case, firms can do internal anticipation by identifying the financial conditions that must be maintained so that they can make wise decisions for the future. In addition, investors or potential investors in family firms can look through indicators of leverage ratios and profitability to assess high or low dividends. The results of this study indicate that family firms classified as manufacturing firms that pay high dividends have an indication of low leverage and high profitability.

The determinants analyzed in this study are limited to the six variables of firm growth, leverage, profitability, institutional ownership, board size, and inflation. Many other factors can affect dividend policy. Therefore, it is suggested for further researchers to study more independent variables to provide additional findings and further discussions on the tendency of dividend policy expropriation in family firms.

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