

# Relationship between Ownership, Capital Structure, and Investment Opportunities with Dividend Policy: A Study in Manufacturing Companies

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**Abstract:** *Dividend policy is the disagreeing desire of the company between managers and shareholders. The company retains cash to increase the company's growth; on the other hand, shareholders expect a reasonably high dividend. This study analyses the effect of managerial ownership, institutional ownership, capital structure, investment prospects, and sales growth on dividend policy. The type of data used in this research is secondary data from the 2017-2021 financial reports. The technique in this study uses panel data regression. Samples were taken using a purposive sampling technique of 71 companies on the Indonesia Stock Exchange (IDX). The results show that managerial ownership, institutional ownership, and sales growth do not affect dividend policy. Capital structure has a significant negative effect on dividend policy. Investment opportunities have a significant positive effect on dividend policy.*

**Keywords:** *dividend policy; managerial ownership; institutional ownership; capital structure; investment prospects; sales growth*

## Introduction

Dividend policy is one of the most controversial topics in corporate finance. The debate about dividend policy has received much attention from financial academics (Al-najjar & Kilincarslan, 2019) because there is no generally accepted explanation for determining dividend payments (Dewasiri et al., 2019). Dividend distribution is a conflicting company desire between managers and shareholders, creating agency conflict (Sarifah & Nahar, 2021).

The 2008 financial crisis caused the subprime mortgage crisis in the United States to become global. It spread throughout the world, causing a negative impact on corporate credit and financing. This crisis also impacted the Indonesian Stock Exchange and the Composite Stock Price Index (IHSG), which experienced a

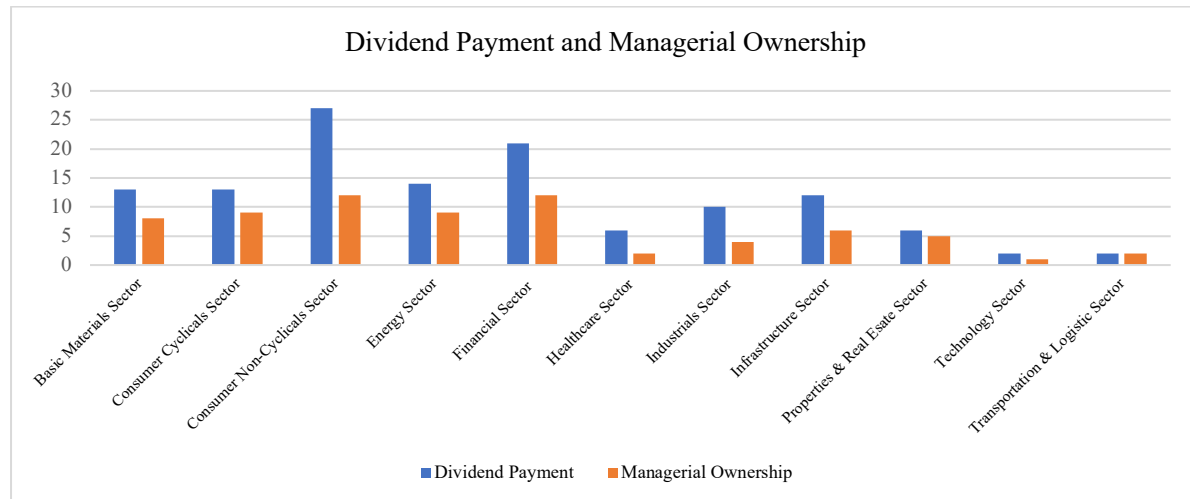
decline. This condition increases business risk because it reduces liquidity. On the other hand, it offers new investment opportunities (Rhee & Park, 2018). After the financial crisis, companies chose a residual dividend policy over a steady dividend to increase assets.

This crisis repeated in 2019 when the COVID-19 pandemic impacted the global economy. The COVID-19 pandemic has caused most companies to reduce or not pay dividends to maintain company survival. However, on the other hand, several health sector companies could maintain or increase their dividends during the COVID-19 pandemic (Ali, 2022). Dividends can avoid negative signals about the company's long-term growth prospects.

The growth of a country can be measured from several indicators, one of which is the growth of the capital market and the securities industry (Ningrum, 2017). Dividend

policy is one of the triggers for capital market movements because this policy is sensitive to investor decisions. Capital markets in developing countries are still unstable, and many companies do not pay dividends regularly

(Tayachi et al., 2021). Indonesia is a developing country, so the dynamics of issues related to dividend policy still have the opportunity to be further investigated.



**Figure 1.** Company Spending Dividends and Managerial Ownership in 2017-2021

Based on the graph above, companies that distribute successive dividends from all manufacturing sectors listed on the IDX could be more stable. Companies that pay many dividends are only a few sectors, including the consumer non-cyclical and financial sectors, while the rest pay little dividends. In addition, managerial ownership of the company still needs to be bigger. This phenomenon is interesting for further research regarding the factors influencing dividend policy.

Finance managers apply different policies to allocate company profits. Dividend policy often creates agency conflict. The company wants to hold cash to increase the company's growth. Meanwhile, shareholders expect high dividends, thereby reducing cash reserves (Ningrum, 2017). The conflict between managers and shareholders can be explained by agency theory. Companies prefer to retain earnings, while shareholders expect dividends. Dividend distribution is an exciting policy because it is difficult for management to determine the right dividend policy (Fitriana et al., 2018).

In some of the findings of previous studies, there are inconsistencies. Tayachi et al. (2021) found that managerial ownership significantly negatively affects dividend policy, while institutional ownership positively affects

dividend policy. This research was conducted in the non-financial sector of developing and developed countries, including Pakistan, India, Bangladesh, Sri Lanka, Malaysia, Australia, New Zealand, Japan, Hong Kong, and Singapore. Ali et al. (2022) proved that the capital structure proxied by the debt-to-equity ratio significantly negatively affects dividend policy. Gangil & Nathani (2018) prove that investment opportunities negatively correlate with dividend policy. Gunawan & Tobing (2018) verified that investment opportunities, profitability, and liquidity positively affect dividend policy. Salim et al. (2021) confirm that sales growth positively affects dividend policy.

Research on the factors that influence the distribution of dividends is fundamental to analyzing the phenomena that occur. This research contributes to academics, especially the agency theory literature, signal theory, and bird-in-the-hand theory. Investors can consider the empirical results of this study as dividend policy analysis data related to ownership, investment opportunities, and company growth. This study examines the effect of managerial ownership, institutional ownership, capital structure, investment opportunities, and sales growth on dividend policy.

## Literature Review

### *Agency Theory*

The agency theory proposed by Jensen & Meckling (1976) explains that companies prefer to retain earnings rather than distribute dividends to shareholders. Retained profit is used for the company's operational activities to increase the company's growth. Events lead to conflicts between the two, which are called agency conflicts. This conflict occurs when the company distributes small dividends or does not distribute dividends to shareholders. Managers, as agents, have a responsibility to shareholders to increase profits by distributing dividends. Management is interested in increasing the company's growth, so it is contrary to the interests of shareholders (Permatasari & Atiningsih, 2021). Higher agency conflicts result in lower dividend payments. Conversely, the lower the conflict between managers and shareholders, the higher the dividend payments (Lailiyah & Abadi, 2021).

### *Signaling Theory*

According to Jensen & Johnson (1995), dividend payments can reduce information asymmetry about the company's prospects. Managers can use dividend policy to signal shareholders about the company's prospects (Kilinçarslan, 2018). The signal theory is widely used to link dividend policy with the company's growth prospects (Adimasu, 2019). This signal theory asserts that an increase in dividends signifies a positive signal, while a decrease in dividends conveys a negative signal to investors about the company's growth. Investors hope that if a company pays higher dividends, it will have better growth prospects in the future and vice versa. If it does not pay dividends, it is considered to have no growth prospects (Bataineh, 2021).

### *Bird-in-the-hand Theory*

According to Gordon (1959), the bird-in-the-hand theory is one theory that can explain dividend policy. An increase in the distribution of dividends indicates a high market price of the company's shares. Conversely, a decrease in

dividend distribution indicates a low market price of the company's shares. Bird-in-the-hand theory assumes that investors prefer to distribute dividends rather than retain them as retained earnings due to information asymmetry and uncertainty of future cash flows (Bataineh, 2021). A higher dividend payout ratio to shareholders will lower the cost of capital and increase firm value. Investors prefer the certainty of present dividend payments rather than reinvestment for projects in an uncertain future (Bataineh, 2021). This theory explains that investors prefer the certainty of present dividend payments rather than reinvestment for projects in an uncertain future (Kilinçarslan, 2018). Investors and shareholders value the company higher if it pays dividends (Kilinçarslan, 2018).

### *Hypothesis Development*

The effect of managerial ownership can be explained by assuming agency theory. Managers who do not own shares in the company tend to ignore the interests of shareholders, which leads to agency conflict. Managerial ownership can reduce agency problems between management and shareholders in the company (Tayachi et al., 2021). Agency theory explains that dividends play a role in controlling the problem of separation of management and ownership, as well as differences in managerial and shareholder priorities. Payment of cash dividends can control managers to invest these funds in unprofitable projects, and there are fears of misuse for their interests (Kilinçarslan, 2018).

Research by Abubakar et al. (2020), Fitriana et al. (2018), Hutagalung & Setiawati (2020), Ningrum (2017), and Tran & Le (2019) show the results that managerial ownership variables do not affect dividend policy. This result is not in line with the research conducted by Tayachi et al. (2021), namely, managerial ownership harms dividend policy. According to Tayachi et al. (2021), there is managerial ownership. Companies tend to use internal company funds to pay lower dividends to shareholders. Companies prefer managers hold it for the company's survival and maximizing profits (Mehdi et al., 2017). The first hypothesis is formulated as follows:

*H1: Managerial ownership has a negative effect on dividend policy*

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

Research by Abubakar et al. (2020), Bataineh (2021), Fitriana et al. (2018), Huang & Paul (2017), Jacob & Lukose (2018), Khan (2022), Reyna (2017), Salju et al. (2022), Tayachi et al. (2021), and Tran & Le (2019), analyze that institutional ownership has a positive effect on dividend policy. Institutional ownership is essential in minimizing agency conflicts between managers and shareholders (Tayachi et al., 2021). The effect of institutional ownership on dividend policy can be explained by agency theory because institutional shareholders have better supervision than managers, so investors prefer to pay dividends (Bataineh, 2021). Ownership of large institutional shares will increase the distribution of cash dividends and the profitability of institutional shareholders (Mehdi et al., 2017).

High institutional ownership will encourage management to invest in profitable projects so that companies can pay higher dividends (Basri, 2019). Institutional investors prefer to distribute free cash flow in the form of dividends rather than retain it because it can reduce managers' takeover of resources and increase the profitability of institutional shareholders (Mehdi et al., 2017). The second hypothesis is formulated as follows:

*H2: Institutional ownership has a positive effect on dividend policy*

#### *Effect of Capital Structure on Dividend Policy*

According to Salju et al. (2022), companies with optimal capital structure impact the company's cost of capital. The effect of capital structure on dividend policy can be explained using agency theory. Companies that have a high capital structure will have an impact on reducing dividend payments. This results in agency conflicts between managers and shareholders because shareholders expect returns in the form of dividends. Ali et al.

(2022), Salim et al. (2021), and Steven et al. (2020) confirm that capital structure has a negative effect on dividend policy. A capital structure with a high debt ratio impacts lower dividend payouts. The third hypothesis is formulated as follows:

*H3: Capital structure has a negative effect on dividend policy*

#### *Effect of Investment Opportunities on Dividend Policy*

The signal theory assumes that dividend policy can be a positive signal indicating a company has growth opportunities (Gunawan & Tobing, 2018). Research Baker et al. (2019), Dewasiri et al. (2019), Gunawan & Tobing (2018), Hartono et al. (2021), Hasanuh (2019), Maharsi et al. (2019), Noviyana & Rahayu (2021), and Salju et al. (2022), state that investment opportunities have a positive effect on dividend policy. Good investment opportunities describe the company's projects to grow well in the future. Good company prospects will unlock opportunities for investors to invest their funds in companies that can pay more dividends (Gunawan & Tobing, 2018). The fourth hypothesis is formulated as follows:

*H4: Investment opportunities have a positive effect on dividend policy*

#### *Effect of Sales Growth on Dividend Policy*

This study uses signal theory assumptions. Companies with high sales growth should ideally get increased profits to distribute dividends (Hutagalung & Setiawati, 2020). High sales growth gives a positive signal to investors regarding the prospect of paying more dividends (Bataineh, 2021). Research by Gangil & Nathani (2018) and Salim et al. (2021) shows that sales growth positively affects dividend policy. Increased sales growth shows that the company has experienced an increase in performance that positively impacts dividend payments (Sarifah & Nahar, 2021). The fifth hypothesis is formulated as follows:

*H5: Sales growth has a positive effect on dividend policy*

## Research Methodology

The research was accomplished using the panel data method, which is a technique that combines time series data and cross-section data. This study uses a population of 825 firms listed on the IDX. The sampling technique for this study used purposive sampling, which was based on specific criteria. Some of the criteria

that will be included in the sample of this study are as follows:

1. Manufacturing firms listed on the IDX in 2017-2021.
2. Manufacturing firms that distribute dividends in a row for 2017-2021.
3. Manufacturing firms that have full managerial ownership in 2017-2021.

**Table 1.** Sample Company Criteria

No	Criteria	Sample
1	Manufacturing firms listed on the IDX in 2017-2021	825
2	Firms that accomplish not allocate dividends in a row during the 2017-2021 years.	(699)
3	Firms that accomplish not hold managerial ownership in 2017-2021	(55)
<b>Total Sample</b>		71

The research data was acquired from financial reports published for 2017-2021. Data sources reach from financial reports got from the websites [www.idx.co.id](http://www.idx.co.id) and [www.idnfinancials.com](http://www.idnfinancials.com). This study uses panel data to determine the relationship between the independent variables in managerial ownership, institutional ownership, capital structure, investment prospects, and sales growth on the dependent variable and dividend policy. The classic assumption tests used in panel data regression are the multicollinearity and heteroscedasticity tests. The panel data statistical model in this study is as follows:

$$DIV_{it} = \alpha + b_1MAN_{1it} + b_2INS_{2it} + b_3DEB_{3it} + b_4INV_{4it} + b_5GRW_{5it} + e$$

Where,

DIV: dividend payout divided by net income

MAN: managerial ownership ratio to total shares

INS: institutional ownership ratio to total shares

DEB: ratio of debt to total equity

INV: stock market capitalization at the end of the year divided by total equity

GRW: increase in sales from the previous year ( $t-t_1$ ) divided by the current year's sales ( $t$ )

## Results and Discussion

The mean dividend payout ratio (DIV) is 4.13, which shows the percentage of dividend payments to the company's net profit. The mean managerial ownership (MAN) and institutional ownership (INS) were 9.06 and 6.44, respectively. The mean debt-to-equity ratio (DEB) is 1.23. Mean investment opportunities (INV) and sales growth were 23.92 and 4.03, respectively.

The results illustrate that several manufacturing companies experienced losses; this can be seen from the negative DIV minimum value. Many management companies in Indonesia do not own shares in these companies, although management has a total share of 9 percent. The debt of manufacturing companies, the maximum value, shows figures above 700 percent. Debt that is too high should be in the spotlight of investors. Investment opportunities and sales growth show an extreme gap between minimum and maximum values. This observation was carried out through the Covid-19 period, which caused many to experience financial crises, even though certain sector companies experienced extraordinary growth.

**Table 2.** Descriptive Statistics

	<b>DIV</b>	<b>MAN</b>	<b>INS</b>	<b>DEB</b>	<b>INV</b>	<b>GRW</b>
Mean	0.41301	0.09060	0.64446	1.23747	23.9255	4.037461
Median	0.32543	0.01877	0.65143	0.70355	1.15036	0.073014
Maximum	4.01482	0.09247	0.90481	7.03615	2146.98	1388.552
Minimum	-1,57727	0.00000	0.03875	0.04333	0.11432	-3.09729
Std. Dev.	0.45003	0.16125	0.18755	1.45521	191.715	73.69397
Observ.	355	355	355	355	355	355

Before testing the hypothesis, a series of tests were conducted to determine the most appropriate panel regression model. In the first Chow test, the probability value of cross-section F is 0.0000 < 0.05, so the fixed effect model is selected as the best model. Then the Hausman test was carried out to obtain a Chi-square probability value of 0.1603 > 0.05, so

the random effects model was chosen as the best model. Finally, the Lagrange multiplier test was carried out; the Breunh-Pagan value was obtained in the cross-section 0.0000 < 0.05. The conclusion of the best model for the panel is the random effect.

**Table 3.** Hypothesis Test With Random Effect Model

<b>Variable</b>	<b>Coefficient</b>	<b>Std. Error</b>	<b>t-Statistic</b>	<b>Prob.</b>
C	2.385440	3.757331	0.634876	0.5259
MAN	-0.200229	0.113044	-1.771251	0.0774
INS	-0.256275	0.173925	-1.473478	0.1415
DEB	-0.157537	0.047347	-3.327268	0.0010
INV	0.094326	0.036507	2.583778	0.0102
GRW	0.062622	0.038464	1.628093	0.1044

The statistical results show that the probability of managerial ownership (0.0744) and institutional ownership (0.1415) is not significant because the probability > 0.005, so the first and second hypotheses of this study are rejected. The third and fourth hypotheses relating capital structure (0.0010) and investment opportunities (0.0102) to dividend policy obtained a significant value < 0.05 with a coefficient according to the hypothesis so that the hypothesis is accepted. The last hypothesis is that sales growth does not affect dividend policy (0.1044) because the probability is > 0.05.

The results of the study show that managerial ownership does not affect dividend policy; this result is in line with previous research by Abubakar et al. (2020), Fitriana et al. (2018), Hadamean & Ratmono (2019),

Hutagalung & Setiawati (2020), Rais & Santoso (2017) and Tran & Le (2019) who concluded that dividend policy is not influenced by managerial ownership. Managerial ownership does not affect dividend policy because the average percentage of shares is tiny. Dividends distributed to shareholders are not affected because the number of dividends received is insignificant (Hutagalung & Setiawati, 2020). Based on the agency theory, which states that the existence of cash dividends can control managers to invest these funds in unprofitable projects to reduce agency conflict. However, the results of this study state that dividend policy is not influenced by managerial ownership due to differences in ownership structure between Indonesia and other countries. Share ownership by managers in Indonesian manufacturing companies is still

low, so the impact on dividend policy cannot be proven (Hutagalung & Setiawati, 2020).

Capital structure has a significant negative effect on dividend policy. This finding is consistent with Ali et al. (2022), Salim et al. (2021), and Steven et al. (2020). These results confirm the agency theory assumption that companies with low capital structures can deliver significant dividends to shareholders. A more significant dividend will reduce the potential for agency problems. Companies with higher debt levels tend to pay smaller dividends and not disburse dividends, which can trigger agency conflicts (Steven et al., 2020).

Investment opportunities have a significant positive effect on dividend policy. The results of this study are in line with the findings of Baker et al. (2019), Dewasiri et al. (2019), Gunawan & Tobing (2018), Hartono et al. (2021), Hasanuh (2019), Maharsi et al. (2019), Noviyana & Rahayu (2021), and Salju et al. (2022). These empirical results support the signaling theory that companies with good investment opportunities signal to shareholders that good company conditions reflect good investment opportunities. High investment opportunities illustrate that companies get more significant profits, so they have the opportunity to distribute dividends to shareholders (Maharsi et al., 2019).

Sales growth does not affect dividend policy. This finding aligns with Evant & Zulvia (2019), Hutagalung & Setiawati (2020), and Sarifah & Nahar (2021). Based on the signal theory, which assumes that an increase will follow an increase in sales growth in profit, the company will increase dividend distribution. However, the research results prove that sales growth does not affect dividend policy. The distribution of dividends does not depend on sales growth. Increased profits do not always follow increased sales; general dividend distribution depends on profits (Hutagalung & Setiawati, 2020). Sales growth in this study period was relatively small because the average manufacturing industry was only 4 percent. This slow average growth was due to the 2019-2021 period when Covid occurred, which caused the non-health and food manufacturing industries to be very shaken. The economic slowdown and scarcity of resources led to an increase in raw material prices; on the other hand, the weakening of consumer purchasing

power decreased margins. Many companies experienced financial stability disturbances during the pandemic, so they focused on surviving the crisis rather than achieving growth.

## Conclusion

This study analyzes the effect of managerial ownership, institutional ownership, capital structure, investment opportunities, and sales growth at the dividend policy stage. As a result, managerial and institutional ownership does not affect dividend policy. Ownership of too small shares cannot control the company's dividend policy. Capital structure has a significant negative effect on dividend policy. These findings support the agency theory that companies with low debt tend to pay more dividends, thereby minimizing agency conflict.

Investment opportunities have a significant positive effect on dividend policy. Investment opportunities affect signal theory; companies with high investment opportunities can send positive signals to shareholders. Sales growth does not affect dividend policy. This finding has implications for signal theory, where sales growth cannot be used as a reference in assessing dividend distribution.

Future research can consider other variables such as board size (Khan, 2022), corporate governance (Dewasiri et al., 2019), and business risk (Pinto & Rastogi, 2019) as determining factors for dividend policy. Good governance can advance the efficiency and effectiveness of firm management so that the firm can perform excellently. In addition, business risks must be appropriately managed to reduce monitoring costs. Firms with more profits are more potential to allocate more dividends.

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