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**Abstract**

Firm’s investment and financing decision had been empirically proven to have a certain influence on firm value, as changes in investment and financing policies will result in alterations of the firm risk profile. In the case of Indonesia, where the degree of investor protection was poor, and minority shareholders were at risk of expropriation of majority shareholders, increase in investment and debt addition was ill-favored and hence, result in a lower firm value. To mitigate the risk of expropriation, firms might chose to apply cash rights to its shareholders by distributing dividends. Using panel data with moderation on 86 Indonesian manufacturing firms, we found that dividend policy positively moderates the effect of the investment decision in firm value and negatively moderates the effect of financing decision on the value of the firm. Our finding act as empirical evidence that dividend policy was an effective tool to mitigate expropriation risk, albeit its used also sent a negative signal to the shareholder when a firm increases loans to paid out dividends.

**Keywords:** Dividend Policy; Financing Decision; Firm Value; Investment Decision

**JEL Classification:** G31, G32.


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**Abstrak**

Kebijakan investasi dan pendanaan perusahaan sudah terbukti secara empiris dalam memengaruhi nilai perusahaan. Dalam kasus Indonesia, dimana kualitas proteksi investor rendah dan pemegang saham minoritas menghadapi risiko ekspropriasi, kenaikan dalam investasi dan jumlah utang tidak disukai dan akan berakibat pada nilai perusahaan yang lebih rendah. Untuk mengurangi risiko ekspropriasi, perusahaan dapat memilih untuk memberikan hak atas arus kas dengan mendistribusikan dividen. Menggunakan data panel dengan moderasi pada 86 perusahaan manufaktur, kami menemukan bahwa kebijakan dividen memoderasi positif keputusan investasi terhadap nilai perusahaan dan memoderasi negatif keputusan pendanaan terhadap nilai perusahaan. Penemuan kami memberikan bukti empiris bahwa dividen merupakan alat yang efektif dalam memitigasi risiko ekspropriasi, meskipun penggunaannya juga memberikan sinyal negatif kepada investor ketika perusahaan menggunakan utang untuk membayar dividen.

**Kata Kunci:** Kebijakan Dividen; Keputusan Pendanaan; Nilai Perusahaan; Keputusan Investasi
The long-term goal of a firm is to maximize the firm value. The stock price is a reflection of the value of the firm and the wealth of the firm’s shareholders. The firm value affected by many factors such as the financial decisions taken by the management firm. The firm value affected by many factors such as the financial decisions taken by the management firm, including investment decisions, financing decisions, and dividend policy. Brealey, Myers, & Allen (2011) stated that investment decisions and financing decisions are important decisions for the firm. The investment decision is an important decision because it shows the going concern of a firm (Myers, 1977). Ehrhardt & Brigham (2011) stated that enough funding to finance their plans is one of the keys for the company’s success, therefore it means that financing decisions are also important.

Firm value tends to increase with the announcement of investment decision as it reflects the firm’s ability to generate future cash flow (Ambarish, John, & Williams, 1987). Furthermore, in the case of Indonesia, it seems that investor reacts positively to firm investment decisions, which correlates to signaling theory (Yuliani, Isnurhadi, & Bakar, 2013). In addition, previous studies on the effect on firm’s value investment decisions conducted by Pamungkas & Puspaningsih (2013) found that investment decisions in Indonesian manufacturing firms positively affect the firm value. Sartini & Purbawangsa (2014) also found that the firm’s investment decisions in Indonesia positively affect the value of the firm. In contrary regarding the effect of investment decisions on the value of the firm was find by Chen, Guo, & Mande (2006) who found that the investment decisions negatively affect the value of the firm.

The financing decision is a decision to determine the type of financing used by companies to fund investment projects and the firm’s operations. Previous studies on the effect of financing decisions on firm value, conducted by Dewi & Wirasedana (2018) and Sartini & Purbawangsa (2014), which found that the financing decisions at the firm in Indonesia have a positive effect on firm value. The opposite of the influence financing decisions on firm value, Naceur & Goaied (2002) and Negi et al. (2012) found that the financing decision does not affect the value of the firm. The use of funds in the form of debt may increase the firm value caused by the reduction of agency conflicts (Jensen & Meckling, 1976), but the use of debt can also increase the risk of bankruptcy which is borne by the firm so that debt has a negative effect on the value of the firm, so that the effect of the debt to the value of the firm to be non-linear (Ehrhardt & Brigham, 2011).

Indonesian is emerging countries which ownership of the firms largely held by one shareholder. Claessens, Djankov, & Lang (2000) stated that firms ownership largely held by one shareholder could cause agency conflict between majority shareholders and minority shareholders. The conflict between majority shareholders and minority shareholders mean that majority shareholders can extract the benefits of the firms at the expense of minority shareholders (Setiawan et al., 2016).

Dividend becomes a relevant issue because of the conflict between majority shareholders and minority shareholders. Jensen (1986) stated that dividend could reduce the agency conflict of free cash flow. Faccio, Lang, & Young (2001) also stated that dividend payment remove the corporate wealth from insider control, so dividend payment can limiting expropriation. Previous studies on the positive effects of dividend policy on the value of the firm conducted by Gregoriou (2012) who found that the dividend policy has a positive effect on the firm value. Alonso, Iturriaga, & Sanz (2005) found that dividend has a positive effect when the growth opportunities are absence.

The previous studies on the effect of investment decisions and financing decisions to firm value show different results. In this study, dividend policy becomes a moderating variable, and we examined the role of dividend policy as conflict mechanism to the effect of investment decisions and financing
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decisions to firm value. This research has contributed to the development of an empirical model of the factors that create value for the firms with dividend policy as a moderating variable.

HYPOTHESES DEVELOPMENT

Future cash flow of the firm determined by investment decisions (Ambarish, John, & Williams, 1987). The good investment opportunities taken by the firm will increase the value of the firm because of the increase of the future cash flow. It is supported by Brio, Miguel, & Pindado (2003) found that investment decisions affect positively on the value of the firm as shareholder expect an increase in future cash flows associated with the investment. McConnell & Muscarella (1985) found that the market reacts positively when the firm announces the increase of capital expenditures. Based on this, the first hypothesis in this study is:

H₁: investment decisions have a positive effect on the firm value

The use of debt in financing decisions to finance the project of the firm can increase the firm value. Alonso, Iturriaga, & Sanz (2005) found that debt could affect positively to firm value supports it. The use of debt can increase the firm value because the passive monitoring by the creditor on the manager when making decisions (Jensen & Meckling, 1976) and can minimize the manager to take the bad investment opportunities because the manager has an obligation to pay the principal and interest (Jensen, 1986). Based on this, the second hypothesis in this study is:

H₂: financing decisions have a positive effect on the firm value

The dividend can reduce the agency conflict of free cash flow (Jensen, 1986). Jensen (1986) stated that the firms must finance its projects using debt because of the dividend payment and it makes the manager more carefully when take the investment decisions because the firms bear principal and interest. Faccio, Lang, & Young (2001) stated that dividend payment could reduce the agency conflict by limiting the expropriation of majority shareholders. Gregoriou (2012) stated that dividend payout made by the firm has a positive impact on the firm value. In this research, agency conflict showed by the effect of investment decision, and firm value, so higher dividend paid by the firm will moderate positively to the effect of investment decisions on firm value because the agency conflict of investment decisions reduced. Based on this, the third hypothesis in this study is:

H₃: dividend policy positively moderates the effect of investment decisions on firm value

Financing decisions are also important decisions because the firms must have enough funds to finance its projects and financing decisions it decisions to decide to the optimal capital structure. Furthermore, using data from 108 firms, Susanti & Restiana (2018) have also empirically proved positive effect of capital structure to firm value in Indonesia. Jensen (1986) stated that dividend could reduce the agency of conflict because the resource under the manager’s control reduced. Setiawan & Phua (2013) stated that dividend is important to protect minority shareholders from majority shareholders. Alonso, Iturriaga, & Sanz (2005) and Iturriaga & Crisostomo (2010) found that dividend could affect positively to firm value. Agency conflict in this research showed by the effect of financing decisions and firm value and the higher dividend distribute to the shareholders will positively moderate to the effect of financing decisions on firm value because the agency conflict reduced. Based on this, the fourth hypothesis in this study is:

H₄: dividend policy positively moderates the effect of financing decisions on firm value
METHODS

The data used for the secondary data is in the form of unbalanced panel data in the 2004-2013 periods. The data were obtained from the Indonesian Capital Market Directory (ICMD) and the Indonesian Stock Exchange (IDX). Data collected in the form of financial ratios. The population of this research is manufacturing companies listed on the IDX and sample in this study using purposive sampling technique with the following criteria: (1) the firm listed in IDX in the 2004-2013 periods; and (2) the firm publishes a complete annual financial statements during the observation period. Total samples obtained are 86 companies and 671 samples.

Data analyzed by using E-Views (Econometric Views). Data analysis techniques using panel data regression with moderation developed in this study are as follows:

Regression Equation:

\[
CV = \alpha_0 + \beta_{11} ID + \beta_{12} FD + \beta_{13} DP + \beta_{14} ID*DP + \beta_{15} FD*DP + \beta_{16} SZ + \beta_{17} PR + \beta_{18} GR + \varepsilon_{it}
\]

Description:

CV : firm value
ID : investment decision
FD : financing decisions
DP : dividend policy
SZ : firm size
PR : profitability
GR : growth

There are two independent variables used in this study, namely investment decisions and financing decisions. Following Cleary (1999), Chen, Guo, & Mande (2006), and Duchin, Ozbas, & Sensoy (2010) investment decision (ID) are measured by the firm’s Capital Expenditures. In order to standardize the variable and include changes in net operating working capital, modifications were added following Soeindra, Tandelilin, & Hermeidito (2016)’s approach. In this study, financing decisions (FD) based on Alonso, Iturriaga, & Sanz (2005) and Chen, Guo, & Mande (2006), was measure by using debt to total assets ratio, which is the ratio of the total debt firm with the total assets of the firm.

Moderating variables on this study is the dividend policy (DP). Dividend policy in this study based on Cleary (1999) and Setiawan et al. (2016) was measured by using dividend payout ratio, which is the ratio between the dividends paid and the firm’s stock price. The dependent variable of this study is the value of the firm (CV). The firm value in this study based on Alonso, Iturriaga, & Sanz (2005), and Herdinata, Tandelilin, & Hermeidito (2013) was measured by using the Q, resulting from the market value of equity plus with a book value of debt divided by the total asset.

There are three control variables used in this study, namely firm size, profitability, and growth. Firm size (SZ) based on Chen, Guo, & Mande (2006) and Abor & Fiador (2013) was measured by the natural logarithm of total asset. Profitability (PR) based on Naceur, Goaied, & Belanes (2006), Herdinata, Tandelilin, & Hermeidito (2013), and Ararat, Black, & Yurtoglu (2017), was measured by return on asset, which is the ratio between net income and total asset. Growth (GR) based on Naceur, Goaied, & Belanes (2006) was measured by the annual growth of total asset. The equation of the variables showed in Table 1.

RESULTS

This research examines the moderating effect of the dividend policy on the effects of investment decisions and financing decisions on firm value. The variable used in this research was ID, FD, DP, and CV. The descriptive statistics of the variables showed in Table 2. The mean of ID was 0.1105. It indicated that the investment of fixed asset and working capital was 11.05 percent from the total
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asset. The mean of FD was 0.4611. It indicated that 46.11 percent of total asset owned by the firm financed with debt. The mean of DP was 0.1866. It indicated that the dividend payment was 18.66 percent from net income. The mean of CV was 1.5028 and indicated that the mean of the market value of equity and debt was 150.28 percent of the total assets owned by the firm. The mean of SZ was 4.8437. It indicated that the mean of firm size was 4.8437 billion. The mean of PR was 0.0786 and indicated that the mean of net income generated from total asset was 7.86 percent. The mean of GR was 0.1509, and it indicated that the mean of annual growth of total asset was 15.09 percent.

<table>
<thead>
<tr>
<th>Table 1. Research Variables</th>
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<tr>
<td><strong>Variable</strong></td>
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<tr>
<td>Firm Value (CV)</td>
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<td></td>
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<tr>
<td>Investment Decision (ID)</td>
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<tr>
<td>Financing Decisions (FD)</td>
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<tr>
<td></td>
</tr>
<tr>
<td>Dividend Policy (DP)</td>
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<td></td>
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<tr>
<td>Firm Size (SZ)</td>
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<td>Profitability (PR)</td>
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<td>Growth (GR)</td>
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<th>Table 2. Descriptive Statistics</th>
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<tr>
<td><strong>Variable</strong></td>
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<tr>
<td>Firm Value (CV)</td>
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<tr>
<td>Investment Decisions (ID)</td>
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<tr>
<td>Financing Decisions (FD)</td>
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<td>Dividend Policy (DP)</td>
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<td>Firm Size (SZ)</td>
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<td>Profitability (PR)</td>
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<td>Growth (GR)</td>
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Table 3. Correlation Analysis

<table>
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<tr>
<th></th>
<th>CV</th>
<th>ID</th>
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<th>DP</th>
<th>SZ</th>
<th>PR</th>
<th>GR</th>
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<tbody>
<tr>
<td>CV</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ID</td>
<td>0.0888*</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FD</td>
<td>-0.0541</td>
<td>0.0371</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>DP</td>
<td>0.4356*</td>
<td>0.0617</td>
<td>-0.2327*</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SZ</td>
<td>0.3356*</td>
<td>0.0521</td>
<td>0.1090*</td>
<td>0.3273*</td>
<td>1.000</td>
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<td></td>
</tr>
<tr>
<td>PR</td>
<td>0.7180*</td>
<td>0.2015*</td>
<td>-0.3683*</td>
<td>0.4223*</td>
<td>0.2126*</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>GR</td>
<td>0.0696</td>
<td>0.5223*</td>
<td>0.1594*</td>
<td>0.0081</td>
<td>0.0590</td>
<td>0.0445</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Notes: *= significance at 1%, 5%

Table 4. The Result of Multiple Linear Regression

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>T-Statistic</th>
<th>Sig.</th>
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</thead>
<tbody>
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<td>C</td>
<td>-9.1987</td>
<td>-4.5907</td>
<td>0.003***</td>
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<tr>
<td>ID</td>
<td>-0.9035</td>
<td>-2.8358</td>
<td>0.0047***</td>
</tr>
<tr>
<td>FD</td>
<td>0.9469</td>
<td>2.9994</td>
<td>0.0028***</td>
</tr>
<tr>
<td>DP</td>
<td>1.2616</td>
<td>3.3395</td>
<td>0.0009***</td>
</tr>
<tr>
<td>ID*DP</td>
<td>3.2540</td>
<td>2.8311</td>
<td>0.0048***</td>
</tr>
<tr>
<td>FD*DP</td>
<td>-1.7926</td>
<td>-2.1588</td>
<td>0.0313**</td>
</tr>
<tr>
<td>SZ</td>
<td>0.7938</td>
<td>4.7774</td>
<td>0.0000***</td>
</tr>
<tr>
<td>PR</td>
<td>7.8246</td>
<td>10.9114</td>
<td>0.0000***</td>
</tr>
<tr>
<td>GR</td>
<td>0.0622</td>
<td>0.4579</td>
<td>0.6472</td>
</tr>
</tbody>
</table>

Notes: ***=significance at 1%, **=significance at 5%

Table 3 in this study showed the correlation analysis. Firm value (CV) has a significant correlation to firm Investment Decision (ID), Dividend Policy (DP), Size (SZ), and Profitability (PR). The highest correlation is shown between firm value and Profitability at 0.7180, and lowest to Investment Decision at 0.0888. The non-zero correlation indicates multicollinearity within the model, which is normal considering the endogenous nature of the variable used. Such correlation, however, is still under the appropriate limit to ensure the validity of the model.

This research analyzes the data with panel data regression with moderation. The first step before we performed panel data regression is to choose the best estimator between common effect, fixed effect, and random effect. To choose a common effect and fixed effect, we use the Chow test, and the fixed effect was chosen. To choose between fixed effect and random effect, we use the Hausmann test, and the fixed effect was chosen.

Table 4 in this study showed that the investment decision had a negative (-0.9035) and significant effect statistically with $\alpha=1$ percent on the firm value so that the first hypothesis is rejected. Table 4 in this study showed that the financing decision had a positive (0.9469) and significant effect statistically with $\alpha=1$ percent on the firm value so that the second hypothesis is not rejected.

Table 4 in this study indicated that the dividend policy positively moderated (3.2540) the investment decision influence on the firm value and significant effect statistically with $\alpha=1$ percent so that the third hypothesis of this study is not rejected.
Table 4 in this study indicated that the dividend policy negatively moderated (-1.7926) the financing decision influence on the firm value and significant effect statistically with $\alpha = 5$ percent so that the fourth hypothesis of this study is rejected.

**DISCUSSION**

**Investment Decision and Firm Value**

The results show that the investment decisions negatively affect firm value. This indicates that investment decisions taken by the firms decrease the firm value and reduce the shareholder’s wealth. The negative effect of investment decisions on firm value may indicate agency conflicts between controlling and minority shareholders. Following Claessens, Djankov, & Lang (2000) findings, firm control in East Asian countries tends to follow pyramid structure, including in Indonesia where single shareholder control more than 70 percent of the firm. With weak shareholder protection (La Porta et al., 1998), the risk of minority shareholder expropriation is relatively high in the country. Firms may have taken risky investment projects for the benefits of controlling shareholders at the expense of minority shareholders. Therefore, minority shareholders may induce a larger discount to firm value when the firm increases their investments, which result in a lower firm value. In addition, the results of this research supported by Chen, Guo, & Mande (2006) which found that the investment decisions affect negatively to the firm value, but contrary with Sartini & Purbawangsa (2014) and Pamungkas & Puspaningsih (2013).

**Financing Decision and Firm Value**

The results show that the financing decisions positively affect firm value. This indicates that the use of debt can increase the firm value and reduce the agency conflict. The result of this research supported by Dewi & Wirasedana (2018) and Susanti & Restiana (2018) which found that the financing decisions positively affect the firm value, but contrary with Iturriaga & Crisostomo (2010) and Cheryta, Moeljadi, & Indrawati (2018) which found that leverage affects negatively on the firm value.

**Dividend Moderated Investment Decision and Firm Value**

The results also show that dividend policy positively moderated the negative effect of investment decisions on firm value. This indicates that the dividend distributes to the shareholders decrease the agency conflict between controlling and minority shareholders. Using dividend, firms may mitigate the agency conflict by distributing cash flows to all shareholders. In Indonesian context, minority shareholders distrust over firms’ investment decisions may dissuade with dividend distribution, which provides certain ‘insurance’ to minority shareholders, lower the risk of expropriation, and hence, increase in firm value.

Based on Jensen (1986) stated that the resource hold by manager reduced after distribution of dividend and the manager must finance its project using debt. The results of this research supported with Iturriaga & Crisostomo (2010) and Sartini & Purbawangsa (2014) which found that dividend policy affects positively to firm value. The results of this research contrary with Pamungkas & Puspaningsih (2013) and Lumapow & Tumiwa (2017).

**Dividend Moderated Financing Decision and Firm Value**

The results also show that dividend policy negatively moderated the positive effect of financing decisions on firm value. This indicates that firm with higher debt will bear more bankruptcy risk when distributing the dividend and finance the project with increasing the debt, the bankruptcy risk
borne by the firm will affect negatively to the firm value. The higher debt also pressures the manager to forego the good investment opportunities because of the cash flow from good investment project priority for bondholders relative to shareholders of the firm (Alonso, Iturriaga, & Sanz, 2005). The results supported by Rakimbysyah & Gunawan (2011) and Lumapow & Tumiwa (2017) that found that dividend policy affects negatively to firm value. This result was not supported by Apriliani & Natalylova (2017) which found that financing decisions do not affect the dividend policy and Sartini & Purbawangsa (2014) and Kajola, Desu, & Agbanike (2015) which found that dividend policy affects positively to firm value.

CONCLUSION AND SUGGESTIONS

Conclusion

Based on the analysis and discussion described, there are several conclusions that can be drawn are the investment decisions affect negatively to firm value, and it means that there is agency conflict on investment decisions because affect negatively to firm value. The financing decisions affect positively to firm value, and it means that the use of debt can affect positively to firm value. The dividend policy positively moderated the effect of investment decisions on the value of the firm. The dividend should be distributed to reduce agency conflict when taken investment decisions. The dividend policy negatively moderated the effect of financing decision on the value of the firm, and it means that the firm must consider the level of debt of the firm when distributing the dividend.

Suggestions

The company should be able to make decisions regarding the dividend policy more carefully and make the right decision on how to finance the investment opportunities for the survival of the company in the future. Dividend payment can give a positive effect but the firms also need to consider bankruptcy risk because the use of debt to finance the investment opportunities. This study only focus on manufacturing firms, the further research can more focus on other sectors.

REFERENCES


