Factors Affecting Corporate Dividend Policy: Evidence from Emerging Market

Roni Budianto (corresponding author)¹
Faculty of Economics and Business, Universitas Sultan Ageng Tirtayasa
Email: budianto_roni404040@yahoo.com

Eko Suyono²
Faculty of Economics and Business, Jenderal Soedirman University
Email: ekyo75@unsoed.ac.id

Atiek Sri Purwati³
Faculty of Economics and Business, Jenderal Soedirman University
Email: aisyaatiek@gmail.com

Irianing Suparlinah⁴
Faculty of Economics and Business, Jenderal Soedirman University
Email: irianing.suparlinah@unsoed.ac.id

Abstract
This study examines the effect of profitability, liquidity, leverage, investment opportunity set, and firm size on dividend policy. The phenomenon shows that dividend policy is an important issue for companies listed on the Indonesia Stock Exchange. The sample was selected using purposive sampling method. This study used 34 manufacturing companies listed on the Indonesia Stock Exchange for the 2016-2020 period (170 observational data). Data is collected from the Indonesia Stock Exchange website. This study used multiple linear regression analysis. The results showed that profitability and firm size had a positive effect on dividend policy, while the investment opportunity set showed a negative relationship. Liquidity and leverage have no effect on dividend policy. Even though there are some limitations, such as the relatively small size of the sample, this study contributes to providing empirical evidence on factors influencing dividend policy, particularly from the emerging market context.

Keywords: Dividend Policy, Profitability, Liquidity, Leverage, Investment Opportunity Set
JEL code: G32, M41.

Abstrak
Penelitian ini mengkaji pengaruh profitabilitas, likuiditas, leverage, set kesempatan investasi, dan ukuran perusahaan terhadap kebijakan dividen. Fenomena menunjukkan bahwa kebijakan deviden merupakan isu yang penting bagi perusahaan-perusahaan yang tercatat di Bursa Efek Indonesia. Sampel dipilih menggunakan metode purposive sampling. Penelitian ini menggunakan 34 perusahaan manufaktur yang terdata di

Kata kunci: Kebijakan Dividen, Profitabilitas, Likuiditas, Leverage, Investment Opportunity Set

INTRODUCTION

Dividend policy has been studied by several researchers for decades (Lintner, 1956; Miller and Modigliani, 1961; Baker et al., 1985; Allen and Michaely, 1994; Al-Najjar and Kilincarslan, 2017; Bostanci et al., 2018). Managers must establish a dividend policy. The policy will affect the value of the company, capital structure, and capital budgeting. Dividend policy is also related to dividend payments (amount of dividend payments and retained earnings) which involve various financial problems (Salehi and Biglar, 2009; Asadi and Zendehdeli, 2014).

Dividend is a return on investment for shareholders or investors according to their share ownership in the company. Dividends are cash outflows that reduce a company's cash balance. Dividend policy can be a signal about the adequacy of the company's cash to pay its obligations. The policy will also have an impact on the company's investment opportunities.

In the dividend decision, the company must consider its survival and growth. Profits will be distributed in part as dividends, set aside for reinvestment and retained earnings. With regard to dividend policy, there are two parties concerned: (1) the interests of shareholders with their dividends, and (2) the interests of the company with retained earnings.

Dividend policy or dividend decision essentially discusses how to determine profit distribution to the shareholders and how much could be retained (Al-Najjar and Kilincarslan, 2017; Bostanci et al., 2018). The ratio between profits paid as dividends to shareholders and retained earnings for investment is a dividend payout ratio (hereafter, DPR). Therefore, the DPR is often used as a proxy to measure dividend policy.
Moreover, following the arguments of agency theory as explained by Jensen and Meckling (1976) managers will limit cash outflows in the form of cash dividends that are too large for reasons of maintaining survival, increasing investment for growth or paying off debt (Yasin et al., 2017; Masry et al., 2018).

Based on signal theory, dividends paid to investors are a signal for the company in the future (Bhattacharya, 1979). High dividends will make the market react positively, considered a signal about the company's good prospects in the future. The market will react negatively if there is a decrease in dividends. This is considered a bad signal for the company's future prospects (Dalton and Pointon, 1997; Rafique, 2012; Al-Najjar and Kilincarslan, 2017; Bostanci et al., 2018).

Dividend payments show a signal that indicates the company's ability to generate profits successfully (Lintner, 1956; Miller and Modigliani, 1961; Morandi et al., 2010). Dividend policy shows the company's ability to pay dividends. There are several factors that influence the company's dividend policy such as profitability, liquidity, leverage, investment opportunities, and company size.

Profitability is absolutely necessary for a company to pay dividends. Profitable companies have the ability to pay dividends on time. Profitability will be the main indicator of a company's ability to pay dividends. Profitability has a positive effect on dividend policy (Lintner, 1956). This argument is also supported by several previous studies that have proven a positive relationship between profitability and the company's ability to pay dividends (Amidu and Abo, 2006; Al-Najjar, 2009; Nuhu and Musah, 2014; Al-Najjar and Hussaney, 2009). However, it was also found that several previous studies yielded conflicting findings where profitability had a negative effect on the company's ability to pay dividends as did Demirgunes (2015) in Turkey. This is in line with Jozwiak (2015), Ardestani et al. (2013), and Kam et al. (2013) who found a negative relationship between profitability and dividend policy.

Companies also need to consider the liquidity factor in determining dividend policy. Liquidity indicates the ability to pay short-term debt as it matures. Companies that have high liquidity will distribute their profits to shareholders in the form of cash dividends. Several studies have found a positive relationship between liquidity and dividend policy such as in Gupta and Banga (2010) in India, Amidu and Abo (2006) in Ghana, and Jozwiak (2015) in Poland. However, there are still several studies that find different
results such as Al-Najjar (2009) in Jordan, Malik et al (2013) in Pakistan, Al-Najjar and Hussaney (2009) in the UK which find that dividend payments have no relationship with liquidity.

Dividend policy can also be affected by leverage. Companies that have a high level of leverage will reduce the distribution of dividends because the profits obtained are used to pay off obligations. This is in accordance with the arguments of Agrawal and Narayanan (1994) which states that when a company finances its business a lot from debt, cash flow will be prioritized to pay off debt so that it will reduce the company's ability to pay dividends. This is supported by several previous studies such as Gugler and Yurtoglu (2003), Aivazian et al. (2006), Al-Najjar and Hussaney (2009), Malik et al (2013), Ardestani et al. (2013) and Nuhu et al (2014). However, Thu et al (2013) actually found that there was a positive relationship between leverage and dividend payout ratio. Likewise, Jozwiak (2015), Gupta and Banga (2010), Guizani and Abaoub (2011) investigate the effect of shareholder decisions between dividend payments and the findings show that leverage has a positive relationship with dividend payments.

The Investment Opportunity Set (IOS) is a combination of real assets and future options (Myers, 1977). If the investment opportunity promises a return that is greater than the required return, then shareholders will be happier if the company holds a profit. Returns are smaller than required, then shareholders will prefer cash dividends. Previous studies that support the above argument include Subramaniam et al., (2011) who found a negative relationship between investment opportunities and dividend policy.

Dividend policy is also determined by the size of the company. Large companies will be able to generate greater profits. It has a better dividend policy compared to smaller companies. This argument is supported by several previous studies such as Jozwiak (2015), Al-Najjar and Hussainy (2009), Al-Najjar (2009), Jeong (2013), Asadi and Oladi (2015) which found that firm size had a positive effect on dividend policy. Several studies found different results such as Khaled and Rehman (2015) in and Guizani and Abaoub (2011) in Tunisia found a negative relationship between firm size and dividend policy. Meanwhile, Malik et al (2013) did not find the effect of firm size on dividend policy.
Based on the background above, this research will contribute by providing empirical evidence from developing countries, i.e., Indonesia, with regard to the factors influencing dividend policy. The purpose of this study is to analyze factors influencing corporate dividend policy which includes profitability, liquidity, leverage, investment opportunity set, and company size.

LITERATURE REVIEW

The capital market is considered efficient if the price describes in a timely manner all the information available and relevant for the decision-making process. The information in this context is a set of messages or news that can be used to change the actions of users to improve their welfare.

The definition of an efficient capital market according to Fama (1970) is a market whose security prices reflect all relevant information. This means that for traded securities, the price that occurs gives an accurate signal for the allocation of capital. Thus, it will be very difficult for investors to obtain abnormal profit by carrying out trading transactions on the stock exchange.

Dividend policy is a very important policy for a company that will involve two parties, namely shareholders and managers who sometimes have different interests. The dividend is defined as payment to shareholders by the company for the profits it receives. Dividend policy is a policy relating to dividend payments by companies, in the form of determining the number of dividend payments and the amount of retained earnings for the benefit of the company (Lintner, 1956; Salehi and Biglar, 2009; Asadi and Zendehdel, 2014).

Brigham and Gapenski (1996) state that any change in dividend payment policy will have two opposite effects. If all dividends will be paid, the reserve interest will be ignored, oppositely if all profits will be retained, then the interests of shareholders will be neglected. To safeguard both interests, managers can adopt an optimal dividend policy. Optimal dividend policy is defined as the ratio of dividend payments determined by taking into account the opportunity to invest funds and the various preferences that investors have regarding dividends rather than capital gains (Miller and Modigliani, 1961; Morandi et al., 2010). This statement is supported by Al-Najjar and Hussainey
(2009) who argue that optimal dividend policy is a dividend payment that creates a balance between the current dividend and future growth to maximize stock prices.

Thus, the dividend policy is a dividend payment decision considering the maximization of current and future stock prices. In determining the number of the dividend to be paid, there are companies that have planned to set a target dividend payout ratio based on the calculation of profits obtained after-tax (Earning after-tax = EAT). Determination of the amount of the Dividend Payout Ratio (DPR) will determine the size of the retained earnings. The greater the dividend paid, the smaller the retained earnings.

The decision regarding dividend policy is a decision concerning how and in what form the dividend is paid to shareholders. There are several dividend payment patterns that can be chosen as a company's dividend policy. Baker and Weygand (2015) mention the following 5 patterns: (1) Stable and occasionally increasing dividends per share. This policy sets a fixed (stable) dividend per share as long as there is no permanent increase in earnings power and the ability to pay dividends. Management increases dividends only if it is certain that the higher level can be maintained definitively. The foundation of thinking is in the shareholders’ psychology point of view where shareholders will feel happy when dividends increase due to it will raise share prices. Conversely, if the dividend falls, shareholders will feel disappointed and this will cause share prices to fall; (2) Stable dividends per share. The rationale for this argument is that the market may value a stock higher if the expected dividend remains stable than if the dividend fluctuates. This method is superior to maintaining a stable payout ratio. Companies that choose this method will pay dividends in a fixed amount from year to year, so this method is also called a stable dollar amount per share. This pattern is most widely applied by companies in the United States; (3) Stable payout ratio. In this pattern, the amount of dividends is calculated based on a constant percentage of earnings. If profits fluctuate, the number of dividends paid will also fluctuate; (4) Regular dividend plus extra. In this way, regular dividends are set in amounts that managers believe can be maintained regardless of earnings fluctuations and capital investment needs. If additional cash is available, the company provides extra dividends (bonuses) to shareholders. This method provides flexibility for the company but creates uncertainty for shareholders. However, this method is probably the best choice for the
company according to the existing conditions. This method recognizes the content of dividend information so that it is expected that giving bonuses can attract buyers who will ultimately increase the company's stock price; and (5) Fluctuating dividends and payout ratios. In this method, dividends and payout ratios fluctuate according to changes in profits and capital investment needs of the company each period. This method seems less popular for publicly traded companies but may be suitable for small companies.

Signaling dividend theory as explained by Bhattacharya (1979) is based on the premise that managers know more about the company's financial prospects in the future compared to shareholders. Based on this theory, if the company announces more dividends than anticipated by the market, this will be interpreted as a signal that the company's financial prospects in the future are better than expected. In other words, this condition will be interpreted as managers’ expectation that the company's performance will improve in the future. Thus management will be reluctant to reduce the distribution of dividends if this is interpreted to worsen the company's financial condition in the future. Therefore, it will reduce share prices.

In 1961 Modigliani and Miller put forward the theory that dividend policy is irrelevant, in which they argue that dividend payments do not affect the prosperity of shareholders. They further argued that the earnings power of the assets reflects the firm's value. Therefore, the proper investment decision is a part of the process in creating a firm’s value. Shareholders feel the same whether receiving current income in the form of dividends or will receive income in the form of capital gains in the future. This is further explained by Modigliani and Miller (1961) where if a company distributes dividends to shareholders, the company must issue new shares as a substitute for the number of dividend payments. Thus, the increase in income from dividend payments will be offset by a decline in share prices as a result of the sale of new shares. So whether the profits obtained are distributed as dividends or will be retained in the form of retained earnings will not affect the prosperity of shareholders.
HYPOTHESES DEVELOPMENT

Profitability and dividend policy

Lintner (1956) argues that a company's ability in paying dividends to shareholders when it is due could be seen from its profitability ratio. Furthermore, the extent to which profitability will be able to affect the company's ability to pay dividends can be measured by earnings per share (EPS). Based on the argument presented by Lintner (1956), theoretically, profitability will have a positive effect on dividend policy which is proxied by eps because only profitable companies can afford to pay dividends. This is also supported by several previous studies which found a positive relationship between profitability and dividend policy which is measured by using DPR as in Beabczuk (2004), Amidu and Abor (2006), Al-Kuwari (2009), Al-Najjar (2009), Nuhu et al (2014), and Al-Najjar and Hussainey (2009).

Based on Lintner's (1956) argument and the findings of some of the previous studies above, this study develops the first hypothesis as follows:

H1: Profitability influences positively on dividend policy

Liquidity and dividend policy

Because dividend payment will affect the company’s cash outflow, the stronger the company's liquidity position means the greater the company's ability to pay dividends. Gupta and Banga (2010) using company data recorded on the Indian capital market for the period 2001-2007 found that there is a significant link between liquidity and dividend policy. Amidu and Abor (2006) using data from 1998 to 2003 on companies listed on the Ghana capital market also found a positive relationship between liquidity and dividend payout ratios. Jozwiak (2015) using data from 2000 to 2013 in Poland found a positive relationship between liquidity and dividend policy. Based on the arguments and findings of some of the previous studies above, this study formulates the second hypothesis as follows:

H2: Liquidity influences positively on dividend policy

Leverage and dividend policy

Agrawal and Narayanan (1994) argue that when a company has a large debt it will reduce its ability to pay dividends. This is because the company's cash flow will be
prioritized to pay liabilities before dividends. So when a high leverage ratio reflects the high company’s debt will reduce the company's ability to pay dividends to shareholders. This argument is supported by several previous studies such as Gugler and Yurtoglu (2003) and Aivazian et al. (2006) who found negative relationship leverage which is proxied by debt to equity ratio (DER) and the company's ability to pay dividends. Similarly, a significant negative link between leverage and dividend policy were found by Al-Najjar and Hussainey (2009) and Malik et al (2013). Moreover, Ardestani et al (2013) using data from 2006 to 2008 in Malaysia found a negative relationship between leverage and dividend policy. Nuhu et al (2014) with data from 2000 to 2009 in Ghana also found that there is a negative link between leverage and dividend policy.

Based on the arguments and findings of some of the previous studies above, the third hypothesis in this study is as follows:

**H3: leverage influences negatively on dividend policy**

**Investment opportunity set and dividend policy**

A company that has idle cash will think about how to optimize the use of existing cash (Smith and Kim, 1994). This condition will encourage companies to see the possibility of investing in profitable projects. So companies that have a set of investment opportunities tend to have high share prices (Aretz and Bartram, 2010). This condition underlies Smith and Watts (1992); Gaver and Gaver (1993) who argue that when a company has an opportunity to invest it tends to prioritize the use of existing cash to invest in a new project rather than to pay dividends. In other words, companies that have investment opportunities will tend to adopt low dividend payout policies (Jones and Sharma, 2001). So that investment opportunities are one of the factors that companies will consider before deciding to pay dividends (Barclay et al., 1995). The above arguments are supported by the findings of several previous studies such as Pandey (2003) using 248 listed companies in Malaysia and Subramaniam et al. (2011) who found a negative relationship between investment opportunities and dividend policy. A similar finding was made by Beabczuk (2004) in Argentina who stated that companies that do not have investment opportunities will pay more dividends than if there is an opportunity to invest. Similarly in the study of Alli et al. (1993) and
Deshmukh (2003) found a negative relationship between investment opportunity sets and the ability of companies to pay dividends.

Basing on above arguments and findings of some of the previous studies, this study formulates the fourth hypothesis below:

**H4: investment opportunity set influences negatively on dividend policy**

**Company Size and dividend policy**

The larger a company, the greater the access to the capital market so that to attract investors the company will promise the ability to pay good dividends (Higgins, 1972; Aivazian et al., 2006). Besides that, as companies grow, they will not be too dependent on internal funding sources (Renneboog and Trojanowski, 2005). Meanwhile, from the perspective of agency theory (Jensen and Meckling, 1976), when a company gets bigger, agency problems become more complex so that the company's ability to pay dividends to all shareholders is seen as an effort to minimize agency problems. Furthermore, Stiglitz (1973) argues that the company will try to reach the mature stage first before deciding to pay dividends so that when the company becomes large and mature it will be better able to pay dividends than small companies. These arguments are supported by several previous studies such as Pandey (2003) in Malaysia, Beabczuk (2004) in Argentina, Shulian and Yanhong (2005) in China, Raable and Hedensted (2008) in Denmark, Al-Kuwari (2009) in Gulf Countries who found that the bigger the company the more the strength in dividends payment to shareholders. The same thing is also found in studies conducted by Jozwiak (2015), Al-Najjar and Hussainey (2009), Al-Najjar (2009) who document that company size positive affect the dividend policy. The same thing also applies to Jeong (2013) with data from 1981 to 2012 in South Korea and found that company size has a positive effect on dividend policy. Likewise, Asadi and Oladi (2015) using data from 2001 to 2010 in Iran found that company size had a positive effect on dividend policy.

Following above the arguments and findings of some of the previous studies, this study develops the fifth hypothesis below:

**H5: company size influences positively on dividend policy**
RESEARCH METHODS

Sample of the study

This study is done in the manufacturing companies listed on the Indonesian Stock Exchange for 2016 to 2020 periods, i.e., 148 companies. The sample is selected by using the purposive sampling method with criteria of manufacturing companies that distribute dividends routinely every year in the 2016-2020 periods. Based on these criteria this study gets 34 companies as a sample in a year or 170 observations for 5 years (2016-2020).

Definition and Measurement of Variables

Profitability

Profitability shows strength of the company in generating profits during a particular period where profitability can be measured using Return on Investment (Farooque et al., 2014) which is calculated by comparing the net income after tax to total assets.

Liquidity

Liquidity reflects the company’s capability in paying short-term financial obligations when it is due and can be measured by using the Current Ratio (Mafudi & Suyono, 2018), i.e., current assets divided by current liabilities.

Leverage

Leverage shows the extent to which a company's assets are financed by debt. Debt to Equity Ratio can be used to measure the level of leverage (Farooque et al., 2014) which is calculated by comparing total debt to total equity.

Investment Opportunity Set

Investment opportunity is a combination of real assets (assets in place) and investment choices in the future. These choices later became known as the investment opportunity set (IOS) (Myers, 1977) which is measured with Sales Growth as follows:

\[
Sales \ Growth = \frac{Total \ Sales \ t - Total \ Sales \ t-1}{Total \ Sales \ t-1}
\]

Where:

Total sales \ t = total sales on the year \ t
Total sales \ t-1 = total sales on the year \ t-1
Company Size

Company size is measured by the natural log of total assets (Farooque et al., 2014; Suyono & Farooque, 2018).

Dividend Policy

The dependent variable in this study is the cash dividend policy. Cash dividend policy is a policy relating to dividend payments by companies in the form of cash which is measured by using a dividend payout ratio (Al-Najjar & Hussainey, 2009; Al-Najjar, 2009; Jeong, 2013; Asadi & Oladi, 2015), which is calculated by comparing dividends per share with net income per share or earnings per share.

Data Analysis

The main analysis of this study is the ordinary least square (OLS). Before the OLS test of descriptive statistics, correlation matrix, and classical assumption of regression which consists of normality, multicollinearity, autocorrelation, and heteroscedasticity were done. Moreover, the regression equation of this study is presented below:

\[ DPR = \beta_0 + \beta_1 \text{PROF} + \beta_2 \text{LIQ} + \beta_3 \text{LEV} + \beta_4 \text{IOS} + \beta_5 \text{SIZE} + \epsilon \] \hspace{1cm} (1)

\( DPR \) is Dividend Payout Ratio as a proxy for dividend policy, \( \beta_0 \) is a constant, \( \beta_1 \) to \( \beta_5 \) are regression coefficients. Profitability (PROF) which is measured by Return on Investment (ROI), Liquidity (LIQ) which is measured by Current Ratio (CR), Leverage (LEV) which is measured by Debt to Equity Ratio (DER), Investment Opportunity Set (IOS) which is measured by Sales Growth), and \( \epsilon \) is error.

RESULT AND DISCUSSION

Descriptif Statistics, Correlation Matrics, and Classical Assumption of Regression

The descriptive statistics for variables under this study is presented in the Table 1. The mean value of the dependent variable of dividend policy which is measured by dividend payout ratio (DPR) is 0.48 ranging from -1.24 to 38.26. The mean values for profitability (PROF), liquidity (LIQ), leverage (LEV), investment opportunity set (IOS), and company size (SIZE) are 0.10, 2.62, 0.95, 0.01, and 5.71 respectively.
Table 1. Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROF</td>
<td>170</td>
<td>-0.0570</td>
<td>0.4011</td>
<td>0.1017</td>
<td>0.1552</td>
</tr>
<tr>
<td>LIQ</td>
<td>170</td>
<td>0.5284</td>
<td>176.0930</td>
<td>2.6377</td>
<td>0.4807</td>
</tr>
<tr>
<td>LEV</td>
<td>170</td>
<td>0.0006</td>
<td>48.4780</td>
<td>0.9505</td>
<td>0.0842</td>
</tr>
<tr>
<td>IOS</td>
<td>170</td>
<td>-0.0586</td>
<td>0.1831</td>
<td>0.0143</td>
<td>0.0507</td>
</tr>
<tr>
<td>SIZE</td>
<td>170</td>
<td>4.6666</td>
<td>7.3233</td>
<td>5.7132</td>
<td>0.3564</td>
</tr>
<tr>
<td>DPR</td>
<td>170</td>
<td>-1.2429</td>
<td>38.2580</td>
<td>0.4763</td>
<td>0.2748</td>
</tr>
</tbody>
</table>

Table 2 presents the correlation matrix between the variables. Most of the independent variables reveal a positive relation with the dependent variable DPR, except for LEV and IOS showing a negative association.

Table 2: Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>DPR</th>
<th>PROF</th>
<th>LIQ</th>
<th>LEV</th>
<th>IOS</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPR</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PROF</td>
<td>0.396**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LIQ</td>
<td>0.057</td>
<td>0.318**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEV</td>
<td>-0.106</td>
<td>0.056</td>
<td>0.168*</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IOS</td>
<td>-0.296**</td>
<td>0.043</td>
<td>0.296**</td>
<td>0.282**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>SIZE</td>
<td>0.159*</td>
<td>0.161*</td>
<td>0.018</td>
<td>0.057</td>
<td>0.106</td>
<td>1</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).

Before running the OLS, this study conducts a test of classical assumption of regression which includes normality, multicollinearity, autocorrelation, and heteroscedasticity. The normality test is done by using the One-Sample Kolmogorov-Smirnov test and the result shows that the value of Asymp. Sig is 0.928 which is higher than 0.05. It means that data on this study is distributed normally.

The presence of multicollinearity can be seen from the value of the variance inflation factor (VIF). The VIF values for PROF, LIQ, LEV, IOS, and SIZE 1.096, 1.258, 1.383, 1.044, and 1.821 respectively which are lower than 10. It means that there is no multicollinearity problem in the model. Moreover, the autocorrelation test by using the Durbin-Watson test and heteroscedasticity test by using Park Glejser document that autocorrelation and heteroscedasticity are not detected in the model.
Results of OLS

The result of OLS regression as presented in the Table 3 describe the relationship between dividend policy (DPR) and profitability (prof), liquidity (LIQ), leverage (LEV), investment opportunity set (IOS), and company size (SIZE). Almost these independent variables have a significant influence on DPR except for LIQ and LEV.

PROF positively influences DPR at p 0.019 with a coefficient value of 1.298. On another side, different from expected, LIQ shows no significant effect on DPR. LEV also shows no significant effect on DPR.

Moreover, IOS shows negative significant association with DPR at p 0.010 with a coefficient value of -5.385. Again, SIZE appears to have a significant positive effect on DPR at p 0.022 with a coefficient value of 9.340.

Based on Table 3, the regression equation is as follows:

\[ DPR = -1.352 + 1.298\text{PROF} + 0.511\text{LIQ} – 0.062\text{LEV} – 5.385\text{IOS} + 9.340\text{SIZE} + \epsilon \]

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-1.352</td>
<td>1.838</td>
<td>-.147</td>
<td>.884</td>
</tr>
<tr>
<td>PROF</td>
<td>1.298</td>
<td>2.653</td>
<td>.207</td>
<td>2.246</td>
</tr>
<tr>
<td>LIQ</td>
<td>.511</td>
<td>.025</td>
<td>.043</td>
<td>.441</td>
</tr>
<tr>
<td>LEV</td>
<td>-.062</td>
<td>.356</td>
<td>-.112</td>
<td>-1.115</td>
</tr>
<tr>
<td>IOS</td>
<td>-5.385</td>
<td>4.852</td>
<td>-.074</td>
<td>-4.826</td>
</tr>
<tr>
<td>SIZE</td>
<td>9.340</td>
<td>3.252</td>
<td>.009</td>
<td>5.098</td>
</tr>
</tbody>
</table>

Table 3. Result of OLS

Discussion

The first hypothesis of this study states that profitability influences positively on dividend policy. The result of OLS regression supports this hypothesis. It means that the finding of this study confirms Lintner (1956) which states that only companies that have the ability to generate profits will be able to pay dividends. This positive relationship shows that the greater the profitability of the company, the company will increasingly have the ability to pay dividends. These results indicate that profitability is considered by the company's management in the payment of cash dividends, so shareholders need to consider profitability when they expect the number of cash dividends to be paid.
The finding of this study is supported by several previous studies that have proven a positive relationship between profitability and the ability of companies to pay dividends (Amidu and Abor, 2006; Al-Najjar, 2009; Nuhu et al., 2014; Al-Najjar and Hussainey; 2009). However, it is contrary to Demirgunes (2015), Jozwiak (2015), Ardestani et al. (2013), and Thu et al. (2013) who found a negative relationship between profitability and dividend policy.

The second hypothesis of this study predicts that liquidity influences positively on dividend policy. The result of OLS regression does not support this hypothesis. This finding indicates that liquidity is not considered by managers in cash dividend payments. It means that good liquidity does not always show sufficient cash to pay dividends.

Moreover, the finding of this study is not in-line with Gupta and Banga (2010), Amidu and Abor (2006), Jozwiak (2015) who found a positive relationship between liquidity and dividend policy. However, it supports the findings of Al-Najjar (2009), Malik et al (2013), AL-Najjar and Hussainey (2009) who found that dividend payments did not have a significant relationship with liquidity.

The third hypothesis of this study expects that leverage influences negatively on dividend policy. The result of OLS does not support this hypothesis. It means that Indonesian companies do not consider leverage on dividend decisions. This empirical finding does not support Agrawal and Narayanan (1994) who argue large debt will reduce the company’s ability to pay dividends. Therefore, it is not in accordance with several previous studies such as Gugler and Yurtoglu (2003) and Aivazian et al. (2006), Al-Najjar and Hussainey (2009) and Malik et al (2013), Ardestani et al (2013), Nuhu et al (2014) who found a negative association between leverage and dividend policy.

The fourth hypothesis of this study states that the investment opportunity set influences negatively on dividend policy. The OLS result strongly confirms this hypothesis as expected. It supports the argument that when companies have investment choices, they will prefer to use their cash to make a new investment rather than to pay dividends as explained by Smith and Watts (1992), Gaver and Gaver (1993), Smith and Kim (1994), Jones and Sharma (2001), etc.

This finding is in-line with Pandey (2003), Subramaniam et al. (2011), Beabczuk (2004), Alli et al. (1993), French (2001), and Deshmukh (2003) who found a negative
relationship between investment opportunity sets and the ability of companies to pay dividends.

The fifth hypothesis of this study predicts that company size influences positively dividend policy. The result of OLS supports this hypothesis. This finding supports the argument of agency theory (Jensen and Meckling, 1976) stating that the bigger the company, the more complex agency problem. Therefore, the payment of cash dividends is one of the ways to reduce the agency problem. It coincides with Pandey (2003), Beabczuk (2004), Shulian and Yanhong (2005), Al-Kuwari (2009) who found that the bigger the company the more the ability to pay dividends. Similarly, Jozwiak (2015), Al-Najjar and Hussainey (2009), Al-Najjar (2009), Jeong (2013), Asadi and Oladi (2015) documented that the size of the company size had a positive link with dividend policy.

CONCLUSIONS AND RECOMMENDATIONS

The aim of this study is to analyze factors affecting dividend policy in Indonesia by using the Indonesian listed companies as the population. Using manufacturing companies for the 2016-2020 periods this study gets 34 companies as a sample or 170 observations for 5 years (2016-2020) which is relatively small as one of the limitations of this study.

This study documents that profitability and company size influence positively on dividend policy, meanwhile, investment opportunity set shows a negative association. However, liquidity and leverage do not have a significant influence on dividend policy.

Relatively low adjusted R Square (i.e., 0.167) means that there are other factors influencing the dividend policy which are out of the model. Therefore, for further studies, it is recommended to try to add other variables that have the possibility to influence dividend policy such as market risk, interest rates, etc. Moreover, it is also suggested to get more samples with a longer observation period.

References


