FACTORS AFFECTING DIVIDEND POLICY WITH BUSINESS RISK AS MODERATION VARIABLES

Rini Tri Hastuti1*, Ardhiansyah Rasyid1, Ari Pambudi1

1Accounting Program, Faculty of Economics and Business, Universitas Tarumanagara, West Jakarta - Indonesia

*Email: rinih@fe.untar.ac.id

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ABSTRACT

This study aims to determine the effect of liquidity, profitability, growth in assets on dividend policy and also the effect of moderating variables on business risk. The research data is data on manufacturing companies listed on the IDX in the form of financial statements for 2018-2020. The sample was selected using purposive sampling technique and obtained a sample of 38 companies. The research data is panel data which is processed using Eviews 12. The results of this study are profitability has a negative and significant effect on dividend policy. Liquidity and growth in assets have no significant effect on dividend policy. Meanwhile, the moderating variable of business risk can be moderated by weakening the relationship between growth in assets and dividend policy. However, the moderating variable of business risk cannot moderate the relationship between liquidity and profitability to dividend policy.

Keywords: dividend policy, liquidity, profitability, growth in asset, business risk

1. INTRODUCTION

Globalization causes the economy in every country to experience rapid development, one of which is Indonesia. Rapid developments in the economy led to the emergence of competitive competition in every company. Competition in every company requires that every company has sufficient capital or funds to be superior to other companies for the sake of the company’s sustainability. Capital or funds are needed by companies to improve the quality of services or products, as well as company performance. The importance of capital or funds makes companies sell company shares to investors, namely external companies on the Indonesia Stock Exchange (IDX) to obtain additional capital or funds.

There are different goals between companies and investors. A company selling shares to investors is to obtain additional funds or capital. However, the purpose of investors buying company shares is to gain profits in the form of dividends originating from the company's net profit. The company will not distribute the entire net profit as dividends. The company will also distribute net profit into retained earnings as part of financing the company's operational activities. The number of dividends distributed by the company also depends on the percentage (%) of shares or the number of shares which indicates investor ownership of a company.

The number of dividends or distribution of dividends is a dividend policy that must be considered by the company. The company's dividend policy can be measured using the Dividend Patout Ratio (DPR). The number of dividends distributed by the company can affect investors' decisions in investing in a company. Investors will invest more in companies that distribute dividends consistently and large. However, the amount of company dividends is also influenced by various factors or variables. In addition, this study also uses a business risk moderating variable, which is something that every company must experience. Every
company is inseparable from a risk which is a discrepancy or fluctuating returns received with those expected.

**Related Work**

**Agency Theory**

This theory is a theory put forward by Jensen and Meckling (1976) [1], where in the business world there are two main parties who interact with each other and have different interests and opinions. are investors. Aryani and Fitria (2020) [2] stated that there is a difference in interests and opinions because the agent is given the task of acting for the benefit of the company, namely his party. While the principal wants the company to benefit itself through large dividend distributions. Then, according to Reinaldo and Ardiansyah (2020) [3] the agent has a better scope of information about the company than the principal.

**Bird in The Hand Theory**

This theory is a theory from Myron Gordon (1956) [4] and John Lintner (1959) as quoted in Permanasari (2017) [5] that shareholders will prefer and prefer companies that distribute profits into cash dividends rather than into capital gains. The reason is explained in Reinaldo and Ardiansyah (2020) [3], namely because the distribution of cash dividends is made by investors as a form of risk reduction. In addition, this is due to capital gains, namely the price of shares cannot be predicted because they fluctuate and can even make a loss.

**Dividend Signaling Theory**

The theory of Bhattacharya (1979) [6] which argues that dividends announced and distributed is a signal for investors to see the company's performance. According to Laura et al. (2018) [7] large dividends will be used as a positive signal indicating that the company is getting good performance in generating net profit. The number of dividends will be considered by investors as a reflection that the company has high prospects. That is, large dividends are a positive signal reflecting the company's ability to generate net income and can be used as a means of indirect communication between companies and investors.

**Dividend Policy**

Widiyanti and Taufik (2019) [8] gave an opinion regarding dividend policy, which is a company decision in dividing the company's net profit obtained at the end of each year. The company's decision is in the form of a decision regarding how much of the company's net profit will be distributed as dividends or retained earnings.

**Liquidity**

According to Kurniawan and Tjhai (2017) [9], "Liquidity is the ability of a company to pay short-term obligations using its current assets". Furthermore, Nurchaqiqi and Suryarini (2018) [10] explained about liquidity, that is, if the company's liquidity is good, this indicates that the company's performance is good. The company's performance is considered good because good liquidity indicates that the company can have cash to pay off or pay short debts / liabilities.
**Profitability**

The explanation according to Husnan (2001) quoted in Reinaldo and Ardiansyah (2020) [3], namely profitability is “the ability to generate profits at a certain level of sales, assets and share capital”. This means, profitability is used as an illustration in assessing a company in generating profits through its operational activities, such as sales, assets, and share capital.

**Growth in Asset**

According to Laura et al. (2018) [7], changes in the increase or decrease in a company's total assets can reflect a company's growth. Further explanation from Wahjudi (2020) [11], namely "Increased corporate asset growth requires substantial funds in the future", this statement means that companies that experience an increase or growth in assets will need money in the future.

**Business Risk**

Seeing the explanation of business risk according to Reinaldo and Ardiansyah (2020) [3], that is, every company in the business world without exception is inseparable and faces risks. The risk faced is in the form of uncertainty or deviation of the expected returns from those produced so that it can result in losses.

**Liquidity with Dividend Policy**

Liquidity is a company's ability to pay short-term obligations using its current assets, which in this study is measured by the current ratio. A high current ratio will be used as a positive signal (signaling theory) because it indicates the company's ability to pay short-term obligations is getting better. That is, a company that is getting better in terms of liquidity, then this indicates the greater availability of cash or funds. The amount of cash or company funds means that the greater the company's ability to distribute dividends. The discussion of the relation of liquidity to dividend policy is in accordance with the research of Diantini and Badjra (2016) [12], Aryani and Fitria (2020) [2] and also Reinaldo and Ardiansyah (2020) [3] which stated that there is a significant positive effect between liquidity on dividend policy. However, this discussion is different from the research of Amin and Khan (2018) [13], which stated that the positive effect is not significant between liquidity and dividend policy.

**Profitability with Dividend Policy**

Profitability in the explanation above is an ability to obtain profits derived from its operational activities. The profits earned by the company will not be entirely distributed as dividends, but profits will also be used as a part of retained earnings which is used for the continuity of the company. Agency theory argues that companies represented by agents will prioritize corporate profits. The agent will prefer to use the profit earned as part of retained earnings so that it is used for the continuity of the company. Companies that are more concerned with profits being a share for retained earnings will make the share for dividends less and less. The explanation outlined is that there is a significant negative effect between profitability on dividend policy which is in accordance with Marmata's research (2020) [14]. However, it is inversely proportional to Prasetyo and Panggabean (2019) [15], Wahjudi (2020) [11], which stated that profitability has no significant negative effect on dividend policy.
**Growth in Assets with Dividend Policy**

Companies that experience changes in total assets can indicate that the company is experiencing business development, namely business expansion. In expanding the business, the company needs funds to carry out the expansion. This is in accordance with agency theory, companies that carry out large business expansions will focus funds for expansion so that the available funds are reduced. Reduced company funds cause the company to have more difficulty paying dividends. This explanation is an explanation of the significant negative effect of growth in assets on dividend policy, which is in line with Laura et al.'s research (2018) [7], Diantini and Badjra (2016) [12], Purwanto and Elen (2017) [16], Cahyani and Suryadi (2019) [17]. However, it is not the same as Perwira and Wiksuana (2018) [18], that there is a significant positive effect between growth in assets on dividend policy.

**Business risk moderates the relationship between liquidity and dividend policy**

Business risk is faced by every company, in which the unexpected value of return can also cause some loss. This loss can reduce the amount of money possessed by the company. Moreover, the loss of this money will make the company difficult to pay its short-term liabilities, as well as the dividend to investors. This explanation about business risk moderation is inline with the research conducted by Reinaldo and Ardiansyah (2020) [3].

**Business risk moderates the relationship between profitability and dividend policy**

Profitability, which is the company's ability to gain profit or profit, if there is a high business risk, it will make profits more unstable or unpredictable company profits which can cause losses. That is, business risk will make the company suffer losses, causing the company to have difficulty paying dividends. This is in accordance with research from Reinaldo and Ardiansyah (2020) [3] and Laura et al. (2018) [7], which stated that business risk can moderate the relationship between profitability and dividend policy.

**Business risk moderates the relationship between growth in assets and dividend policy**

Companies that experience growth as judged by changes in the value of total assets will require funds to be focused on business expansion. Expansion of the company's business and coupled with high business risk conditions, it causes a greater possibility of high losses and has an impact on the dividend policy. As a result, as explained by the agency theory, companies that are more concerned with the interests of the company make decisions to reduce the number of dividends. This explanation is in line with the explanation in Laura et al. (2018) [7], that business risk can moderate the relationship between growth in assets and dividend policy.

**Hypothesis Development**

Based on research conducted by Diantini and Badjra (2016) [12], Reinaldo and Ardiansyah (2020) [3], and Aryani and Fitria (2020) [2], liquidity has a positive and significant effect on dividend policy. However, there is research with different results conducted by Amin and Khan (2018) [13], namely liquidity has no effect on dividend policy. So, the hypothesis in this study is:

**H1: liquidity has a positive and significant effect on dividend policy.**
Based on research conducted by Marmata (2020) [14], profitability has a negative and significant effect on dividend policy. However, there are different results by Prasetyo and Panggabean (2019) [15], that profitability has no effect on dividend policy. So, the hypothesis in this study is **H2**: profitability has a negative and significant effect on dividend policy.

Based on research by Purwanto and Elen (2017) [16], as well as Cahyani and Suryadi (2019) [17], growth in assets has a negative and significant effect on dividend policy. However, there are different results by Perwira and Wiksuana (2018) [18], which stated that growth in assets has a positive and significant effect on dividend policy. Then, the hypothesis formed is: **H3**: Growth in assets has a negative and significant effect on dividend policy.

Development of a hypothesis on business risk variables, which is based on research conducted by Reinaldo and Ardiansyah (2020) [3] business risk can moderate the relationship between liquidity and dividend policy. Therefore, this study forms the following hypothesis **H4**: Business risk can moderate the relationship between liquidity and dividend policy.

Business risk as a moderating variable can moderate the relationship between profitability and dividend policy (Reinaldo and Ardiansyah, 2020) [3] and (Laura et al., 2018) [7]. Therefore, this study forms the following hypothesis: **H5**: Business risk can moderate the relationship between profitability and dividend policy.

Business risk can moderate the relationship between growth in assets and dividend policy (Laura et al, 2018) [7]. Therefore, this study forms the following hypothesis: **H6**: Business risk can moderate the relationship between growth in assets and dividend policy.

The framework of thinking in this study is as follows:

![Diagram showing the relationship between liquidity, profitability, growth in assets, business risk, and dividend policy](Image)

**Figure 1. Model and Research Hypothesis**

**Our Contribution**

The main objective of this research is to determine the effect of liquidity, profitability, growth in assets on dividend policy and also the effect of moderating variables on business risk. The
research data is data on manufacturing companies listed on the IDX in the form of financial statements for 2018-2020.

2. RESEARCH METHOD

Population and Samples

The research conducted is quantitative research and uses secondary data, namely the financial reports of companies listed on the Indonesia Stock Exchange in 2018-2020. The sample selection in this study used a purposive sampling technique which is a technique by compiling certain criteria in selecting samples. The criteria that have been prepared are (1). Manufacturing companies listed on the IDX in 2018-2020. (2). Manufacturing companies on the IDX that did not conduct an Initial Public Offering (IPO) in 2018-2020. (3) Manufacturing companies on the IDX that prepare financial reports in rupiah. (4). Manufacturing companies on the IDX that are not losing money in 2018-2020. (5) Manufacturing companies on the IDX that distributed dividends consistently during 2018-2020. (6). Manufacturing companies on the IDX that consistently prepare and announce financial reports ending December 31. Based on the criteria that have been prepared, 38 companies were selected.

Data Analysis Technique

Company data selection method is non-probability sampling with purposive sampling technique. The panel data regression model is used for hypothesis testing. Using EViews 12 Software. The tests conducted in this study consisted of descriptive statistical analysis, adjusted R2 test, multiple linear regression analysis, and t test.

Variables and Measurement

The operationalization and measurement variables used are as follows:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Source</th>
<th>Measurement</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dividend Policy</td>
<td>Reinaldo and Ardiansyah (2020)</td>
<td>DPR = \frac{\text{Dividend per share}}{\text{Earning per share}}</td>
<td>Ratio</td>
</tr>
<tr>
<td>Liquidity</td>
<td>Reinaldo and Ardiansyah (2020)</td>
<td>CR = \frac{\text{Current asset}}{\text{Current liabilities}}</td>
<td>Ratio</td>
</tr>
<tr>
<td>Profitability</td>
<td>Reinaldo and Ardiansyah (2020)</td>
<td>EPS = \frac{\text{Net profit}}{\text{Net equity shares Outstanding}}</td>
<td>Ratio</td>
</tr>
<tr>
<td>Growth in Asset</td>
<td>Laura, et. al (2017)</td>
<td>GROWTH = \frac{\text{Total Asset}<em>t - \text{Total Asset}</em>{t-1}}{\text{Total Asset}_{t-1}}</td>
<td>Ratio</td>
</tr>
<tr>
<td>Business Risk</td>
<td>Reinaldo and Ardiansyah (2020)</td>
<td>BR = \frac{\text{EBIT}}{\text{Total Asset}}</td>
<td>Ratio</td>
</tr>
</tbody>
</table>
3. FINDINGS AND DISCUSSIONS

Descriptive Statistics

Based on 114 data (38 companies), the descriptive statistical test is as follows:

- DPR as the dependent variable obtaining a mean of 0.502122. The median is 0.344144. The maximum value is 3.968352, the minimum value is 0.015429, with a standard deviation of 0.506038.

- CR or liquidity has a meaning of 5.364230. The median is 2.522697. The maximum value is 208.4446, the minimum value is 0.652900 in 2019, and the standard deviation is 19.50517.

- EPS or profitability shows a mean value of 166.8147. Median 84.54552. The maximum value is 1193.898, the minimum value is 1.105626, and the standard deviation is 218.1197.

- GROWTH or growth in assets has a mean value of 0.112825. The median is 0.079292. The maximum value is 1.676057, the minimum value is -0.200613, and the standard deviation is 0.212148.

- The moderating variable BR or business risk has a mean value of 0.024021. The median is 0.015877. Maximum value of 0.135723 in 2020, a minimum value of 0.000720 and a standard deviation of 0.025323.

Hypothesis Testing Results

Estimation of the panel data model before moderating the chow test, gets a prob value, cross-section chi-square is 0.0000, meaning that H0 is rejected, and the fixed effect model is the right model for research. Meanwhile, the estimated panel data for the model after the Chow test moderation obtains 0.0001, meaning that H0 is rejected, and the fixed effect model is the right model for research.

Hausman test for the model before prob moderation. random cross-section has a value of 0.0190, meaning that H0 is rejected, and the fixed effect model is the right model for research. However, the Hausman test estimates the model after prob moderation. random cross-section has a value of 0.1530, meaning that H0 is accepted, and a random effect model is selected. Thus, the estimation of the panel data model after moderation must be continued with the lagrange multiplier test.

The lagrange multiplier test for model estimation after moderation has a breush-pagan value of 0.0736, meaning that H0 is accepted, and the common effect model is the right model for research.
Table 2. Fixed Effect Model Test Results (Before Moderation)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.679764</td>
<td>0.085181</td>
<td>7.980271</td>
<td>0.0000</td>
</tr>
<tr>
<td>X1_CR</td>
<td>0.000588</td>
<td>0.002691</td>
<td>0.218379</td>
<td>0.8277</td>
</tr>
<tr>
<td>X2_EPS</td>
<td>-0.001058</td>
<td>0.000463</td>
<td>-2.286671</td>
<td>0.0251</td>
</tr>
<tr>
<td>X3_GROWTH</td>
<td>-0.038087</td>
<td>0.252430</td>
<td>-0.150880</td>
<td>0.8805</td>
</tr>
</tbody>
</table>

Effects Specification

Cross-section fixed (dummy variables)

| R-squared | 0.535145 |
| Adjusted R-squared | 0.280430 |
| S.E. of regression | 0.429259 |
| Sum squared resid   | 13.45122 |
| Log likelihood      | -39.94266 |
| F-statistic         | 2.100957 |
| Prob(F-statistic)   | 0.002963 |

Source: Processed using EViews 12

Based on Table 2, the equation model before moderation is:

\[ DPR = 0.679764 + 0.000588 \text{ CR} - 0.001058 \text{ EPS} - 0.038087 \text{ GROWTH} + \varepsilon \]

Table 3. Common Effect Model Test Results (After Moderation)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.384709</td>
<td>0.080468</td>
<td>4.780903</td>
<td>0.0000</td>
</tr>
<tr>
<td>X1_CR</td>
<td>4.345261</td>
<td>0.002672</td>
<td>0.016260</td>
<td>0.9871</td>
</tr>
<tr>
<td>X2_EPS</td>
<td>-0.000235</td>
<td>0.000321</td>
<td>-0.730509</td>
<td>0.4667</td>
</tr>
<tr>
<td>X3_GROWTH</td>
<td>0.385954</td>
<td>0.320881</td>
<td>1.202795</td>
<td>0.2317</td>
</tr>
<tr>
<td>Z_BR</td>
<td>9.503747</td>
<td>3.737508</td>
<td>2.542803</td>
<td>0.0124</td>
</tr>
<tr>
<td>M1</td>
<td>-0.152821</td>
<td>0.624257</td>
<td>-0.244804</td>
<td>0.8071</td>
</tr>
<tr>
<td>M2</td>
<td>-0.001077</td>
<td>0.005889</td>
<td>-0.182849</td>
<td>0.8553</td>
</tr>
<tr>
<td>M3</td>
<td>-35.02101</td>
<td>9.449690</td>
<td>-3.706048</td>
<td>0.0003</td>
</tr>
</tbody>
</table>

R-squared | 0.231189 |
| Adjusted R-squared | 0.180419 |
| S.E. of regression | 0.458120 |
| Sum squared resid   | 22.24661 |
| Log likelihood      | -68.62048 |
| F-statistic         | 4.553614 |
| Prob(F-statistic)   | 0.000178 |

Source: Processed using EViews 12

Based on Table 3, the equation model after moderation is:

\[ DPR = 0.384709 + 4.345261 \text{ CR} - 0.000235 \text{ EPS} + 0.385954 \text{ GROWTH} + 9.503747 \text{ BR} - 0.152821 \text{ CR BR} - 0.001077 \text{ EPS BR} - 35.02101 \text{ CR BR} + \varepsilon \]
The R² test before moderation obtained an adjusted R-squared value of 0.280430, meaning that the independent variables studied could explain the dependent variable by 28.043% and 71.957% explained by other independent variables not examined. The adjusted R-squared value after moderation is 0.180419, meaning that 18.0419% is the ability of the independent variable to explain the dependent variable and 81.9581% is explained by other variables.

The F-test before moderation (Table 2) obtained an F-statistics of 0.002963 (< 0.05), meaning that liquidity, profitability, and growth in assets partially have a significant effect on dividend policy. Next, the F-statistics after moderation (Table 3) is 0.000178 (< 0.05) liquidity, profitability, and growth in assets, business risk M1, M2 and M3 partially have a significant effect on dividend policy.

The t-test was carried out with the aim of knowing the effect and also the relationship of the independent variables on the dependent variable. If you get a prob. < 0.05, the independent variables studied can influence and be significant to the dependent variable. In table 2 the value of prob. liquidity is 0.8277 (> 0.05) meaning that liquidity has no significant effect on dividend policy or H1 is rejected. The profitability t test obtains prob. of 0.0251 (< 0.05) with a negative coefficient which means profitability has a negative and significant effect on dividend policy or H2 is received. Prob value. growth in assets is -0.8805 (> 0.05), which means H3 is rejected because growth in assets has no significant effect on dividend policy. The t test after moderation can be seen from table 3, M1 shows the prob value. 0.8071 (> 0.05), meaning that H4 is rejected because business risk cannot moderate liquidity on dividend policy. M2 obtains a prob value. 0.8553 (> 0.05), then H5 is rejected, or business risk does not moderate profitability on dividend policy. Lastly, the M3 earned a prob. 0.0003 ( < 0.05) and a negative coefficient means that H6 is accepted, or business risk can be moderated by weakening the relationship between growth in assets and dividend policy.

Discussions

Based on the results of research that has been done, liquidity, profitability, and growth in assets together can have a significant effect on dividend policy. The research which was conducted partially obtained the results of liquidity and growth in assets which did not have a significant effect on dividend policy. Business risk cannot moderate liquidity and profitability on dividend policy. However, profitability has a significant negative effect on dividend policy, and business risk can moderate growth in assets on dividend policy. Liquidity does not affect dividend distribution, because it is supported by the agency theory which states that management will act for the benefit of the company. This causes the company's large number of current assets to not mean the company distributes large dividends. The company will divert more current assets to pay debts and pay for the company's operations. Profitability has a negative effect because the company's nature is concerned with company profits, this causes the company's profit to be transferred as retained earnings, so that the dividend share will decrease. Growth in assets has no effect on dividend policy because the increase in the company's total assets is not only caused by an increase in current assets but can occur because non-current assets (land or buildings) increase due to business expansion. Business risk cannot moderate liquidity with a dividend policy because the data obtained shows that the overall average liquidity is 5.364230, this value means that the average company has a good ability to provide current assets or cash. Business risk cannot moderate profitability on dividend policy because there is a bird in the hand theory which states that investors prefer companies that distribute dividends. Thus, the presence of business risk does not affect the company's dividend distribution. Finally, business risk can moderate growth in assets on
dividend policy because the company's asset growth causes companies to focus money on business expansion, so that coupled with business risk will make income fluctuate and can even cause losses. So that this situation makes the company reduce dividend payments.

4. CONCLUSIONS AND SUGGESTIONS

The first research limitation is the variables studied which only amount to three independent variables (liquidity, profitability, and growth in assets). The next limitation is regarding the research year which only examines three periods, namely 2018-2020 for manufacturing companies listed on the IDX.

The researcher's suggestion for the limitations above is that further researchers are advised to add the independent variables studied so that the research has better results. The next suggestion is that the year under study should be added so that the research can obtain results that are more representative and describe the real situation. Finally, other studies are expected or suggested to examine industries other than manufacturing, for example the banking industry.

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