The Effect of Profitability, Debt Policy, And Liquidity on Corporate Values with Dividend Policy as Moderating Variables

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Abstract. This research aimed to determine the effect of profitability, debt policy, and Liquidity on firm values with dividend policy as moderated variables. The subject in this research uses manufacturing companies listed on the Indonesia Stock Exchange. The data used are secondary in the form of annual reports in 2016 - 2018. The sampling technique used in this research was purposive sampling. Forty-two companies meet the criteria as a research sample. Data analysis techniques used in this research is multiple regression analysis using the absolute difference method. The result shows that profitability has a positive and significant effect on firm value. In contrast, debt policy and Liquidity have a negative and significant effect on firm value. The dividend policy can moderate the relationship between profitability and firm value. Dividend policy is able to moderate the relationship between debt policy and firm value. The dividend policy is not able to moderate the relationship between Liquidity and firm value.

Keywords: Profitability, Debt Policy, Liquidity, Dividend Policy, and Firm Value

1. Introduction

The development of the business world today, coupled with the uncertainty of the global economic situation, causes increasingly fierce competition between companies. This competition makes each company increasingly competing to improve its performance to increase the welfare of shareholders and attract the interest of potential investors to buy company shares [31]. A company with excellent prospects can be characterized by the amount of interest from investors to invest their shares in a company.

One of the most desirable companies by investors is companies in the manufacturing industry sector. The Ministry of Industry (Kemenperin) noted that investment in the manufacturing industry sector continues to grow significantly. One factor that causes high investor interest in manufacturing companies is due to the company's excellent performance. The performance of manufacturing companies continues to show positive performance throughout February 2019, with the Purchasing Managers Index (PMI) data of Indonesian manufacturing companies at the level of 50.1. This figure is up from the previous month's level, which was 49.9. Furthermore, it indicates that the manufacturing industry sector is increasing. This year, the Ministry of Industry (Kemenperin) projects manufacturing industry growth of 5.4%. Subsectors that are expected to grow high include the food and beverage industry, the machinery industry, the textile and apparel industry, the leather industry, the footwear industry, the metal goods industry, computers, and electronics goods.
Manufacturing companies are companies engaged in processing raw goods into finished goods to add value to the goods [28]. Of course, there are many manufacturing companies in Indonesia, one of which is listed on the Indonesia Stock Exchange. Nevertheless, investors are not just arbitrary in choosing. Investors will consider many factors before making an investment decision. One of the considerations of investors to invest is to consider the value of the company.

High company value is the leading indicator for investors. According to Puspitaningtyas [27], the measurement of company value is a source of information relating to investor interest in investing in company shares. This measurement reflects how investors value the company's shares. Thus, high stock prices indicate that the company has good corporate value in the eyes of investors. Company value can be measured using the price to book value (PBV). PBV is a comparison between the company's stock price, which is valued by the market, and the book value of shares [24].

Many factors can affect a company's value, one of which is the company's financial performance. Financial performance can be measured using financial ratios. The ratios in this research are profitability, debt policy, Liquidity, and dividend policy as moderating variables. This research is a development of research conducted by [24] by adding a new variable, namely Liquidity. Researchers add the liquidity variable because the variable can be used as a good signal by investors to increase stock prices, which means the value of the company will also increase [10].

2. Literature Review

2.1 The value of the company

The value of the company is a value that can be used to measure how the viewpoint of investors on the level of success of a company that is often associated with stock prices. High stock prices will cause high company value [20]. The higher the share price, the higher the level of shareholder prosperity [31]. Efforts can be made to maximize the shareholders' welfare by maximizing the present value per share that has been outstanding. The intended stock value is the market value or the market price of the stock. The market value of shares reflects the value of the company. In other words,

to the signaling theory, if the manager of the company has good information it will provide an information signal to the market then a conclusion will be drawn from the signal given. Meanwhile, according to Fahmi [10] states that signaling theory discusses the ups and downs of prices in the market such as stock prices, bonds and so on, so that it will affect investor decisions. The response of investors regarding positive and negative signals will greatly affect market conditions.

2.2 Profitability

Profitability is the ability of a company to earn profits or use its own capital within a certain period [18]. Meanwhile, according to Fahmi [10] profitability is a benchmark of the company's success in generating profits by measuring the efficiency of the use of company assets. So, it can be concluded that the existence of profitability can be used as a smooth analysis tool for a company and its ability to get profits.
One of the signals or information issued by the company is in the form of financial information that explains the company's financial performance that can be measured by calculating various financial ratios, one of which is the profitability ratio [15]. Thus, according to the concept of signaling theory, companies with a high level of profitability will try to provide information to shareholders that the company has run a good business so that it is able to get a high level of profitability [3].

Ningrum & Asandimitra (2017) said that profitability could affect the company's stock price so that it can be used as a signal for investors to assess the merits of the company. Profitability has a positive and significant effect on firm value based ([28]; [19]; [21]; [23]; [32]; [31].)

2.3 Debt Policy

Debt policy is a policy taken to fund the company's operational activities [25]. Ramadhan et al. [30] say that the source of funding from debt policies is obtained from external sources. According to Modigliani and Miller theory the use of debt will always be more profitable when compared to the use of own capital [10]. [24] state that an increase in debt can be interpreted as the company's ability to pay obligations in the future. With the company's debt will be considered to have a low level of business risk, this can be a positive response for the market.

The use of debt can provide benefits to the company, because interest costs on debt can be a deduction from tax obligations [8]. Profitable companies use the most debt because it can protect corporate income from taxation [39]. The statement is in accordance with the concept of trade off theory which explains that the use of debt does not only provide benefits, but also there are sacrifices (costs). The benefits of using debt come from tax savings because of the nature of the tax deductibility of interest payments (interest payments can be used to reduce the tax burden). But in an imperfect capital market situation bankruptcy costs arise [15].

Sources of funding from debt policies are obtained from external sources [30]. The use of high debt will increase the company's value because the use of debt can save tax payments. Debt policy had a positive and significant effect on firm value [24]; [17]; [23].

2.4 Liquidity

Liquidity is a picture of a company's ability to meet its short-term obligations [28]. Liquidity is important to analyze because failure to pay obligations can lead to bankruptcy [10]. The company's management always tries to maintain a healthy and liquidity condition of the company that is fulfilled in a timely manner. Companies with high liquidity can be interpreted that the company has sufficient funds to meet its short-term obligations [37].

Liquidity is the company's ability to settle short-term obligations [13]. Companies with current Liquidity will pay off short-term obligations promptly [9]. The high level of Liquidity indicates that the company is in good condition to attract investors to invest, thereby increasing demand for company shares and, of course, will increase the price of a company's shares [35].

The high ratio of company liquidity will be good news. This is in line with the signaling theory approach which states that a high liquidity ratio is likely to have an effect on rising stock prices. Then the investor will decide to buy shares when the company's liquidity ratio is
healthy and stable [10]. Liquidity has a positive and significant effect on value company [31]; [17]; [28]; [37]; [29].

2.5 Dividend Policy

Dividend policy is the company's financial decision, whether the profits obtained will be distributed to shareholders or will be retained as retained earnings [28]. Companies always look for optimal dividend policies to achieve a balance between current dividends and future growth so as to maximize the company's stock price [16]. A company with a high level of dividend distribution would make investors interested and thus increase the demand for shares. Some dividend policy theories are as follows [33]:

a) Dividends Are Not Relevant
Dividend theory is irrelevant put forward by Modigliani and Miller (1961) which states that dividend policy does not affect the market price of a company's stock or the value of the company.

b) Bird in the Hand Theory
Bird in the hand theory developed by Gordon (1959) and Lintner (1962) said that dividend policy has a positive effect on stock prices. This happens because investors prefer to receive dividends compared to capital gains because dividends have a lower risk than capital gains [20].

c) Signaling Theory
Signaling theory which was stated by [5] told that the distribution of dividends can be considered as an implicit information impingement about the company's future profit potential [12].

d) The Tax Effects Theory
Based on this theory, dividend policy has a negative influence on the market price of a company's stock. This happens if there is a difference between the personal tax rate on dividend income and capital gains.

Dividend policy is one of the critical aspects of the goal of maximizing company value. Dividend policy is a decision obtained by the company regarding whether profits generated by the company at the end of the period are distributed to shareholders or the profits are retained as an addition to the company's capital that will be used in the company's development activities or investments in the future. In this study, dividend policy is a moderating variable because it is considered a signal to investors in assessing the merits of a company's performance [24]. Research conducted by [19], and [6] found that dividend policy can moderate the relationship between profitability and firm value. [24], [31], [38], and [17] have conducted research that results in dividend policy being able to moderate the relationship between debt policy and firm value. Then, research conducted by [19] found that dividend policy can moderate the relationship between Liquidity and firm value.

This research is a development of research conducted by [24] by adding a new variable, namely Liquidity. Researchers add the liquidity variable because the variable can be used as a good signal by investors to increase stock prices, which means the value of the company will also increase [10].

2.6 Formulation of the problem

Based on the description from the background above, the main issues in this study are:

a) Does profitability have a positive and significant effect on firm value?
b) Does the debt policy have a positive and significant effect on the value of the company?
c) Does Liquidity have a positive and significant effect on firm value?
d) Does the dividend policy able to moderate the relationship between profitability and firm value?
e) Does the dividend policy able to moderate the relationship between debt policy and firm value?
f) Does the dividend policy able to moderate the relationship between Liquidity and firm value?

2.7 Research Model Development

Based on the description above can be described the following framework:

![Framework Diagram]

Hypothesis:
H1: Profitability has a positive and significant effect on firm value.
H2: Debt policy has a positive and significant effect on firm value.
H3: Liquidity has a positive and significant effect on firm value.
H4: Dividend policy can moderate the relationship between profitability and firm value.
H5: Dividend policy is able to moderate the relationship between debt policy and corporate value.
H6: Dividend policy is able to moderate the relationship between liquidity and firm value.

3. Method

The subjects in this study used manufacturing companies listed on the Indonesia Stock Exchange. The data used in this study are secondary data in the form of annual reports in 2016.
The sampling technique used in this study was purposive sampling. There are 42 companies that meet the criteria as a research sample. Data analysis technique used in this study is multiple regression analysis using the absolute difference method.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicators / Formulas</th>
<th>Scale</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>The value of the company</td>
<td>PBV = Market Price per Share / Book Value per Share</td>
<td>Ratio</td>
<td>([10]: 85)</td>
</tr>
<tr>
<td>Profitability</td>
<td>ROA = Earning after tax / Total Assets</td>
<td>Ratio</td>
<td>([10]: 83)</td>
</tr>
<tr>
<td>Debt policy</td>
<td>DER = Total Debt / Total Assets</td>
<td>Ratio</td>
<td>(Husnan, 2015: 81)</td>
</tr>
<tr>
<td>Liquidity</td>
<td>CR = Current Assets / Total Current Liabilities</td>
<td>Ratio</td>
<td>(Husnan, 2015: 81)</td>
</tr>
<tr>
<td>Dividend Policy</td>
<td>DPR = Dividends per Share / Price per Share</td>
<td>Ratio</td>
<td>([10]: 85)</td>
</tr>
</tbody>
</table>

a) Multiple Linear Regression Analysis

The data analysis technique used in this study is multiple regression analysis with moderation using the absolute difference method. This test is done by regressing the absolute difference in the standardized independent variable with the variable hypothesized as a standardized moderating variable.

The regression model in this study was formulated with the following equation [34]:

\[ Y = \alpha + \beta_1 ZX_1 + \beta_2 ZX_2 + \beta_3 ZX_3 + \beta_4 | ZX_1 - ZM | + \beta_5 | ZX_2 - ZM | + \beta_6 | ZX_3 - ZM | + e \]

Information:
- \( Y \): The value of the company
- \( ZX_1 \): Standardize Profitability
- \( ZX_2 \): Standardize the Debt Policy
- \( ZX_3 \): Standardize Liquidity
- \( ZM \): Standardize Dividend Policy
- \( | ZX_1 - ZM | \): Absolute difference in profitability with dividend policy
- \( | ZX_2 - ZM | \): Absolute difference in debt policy with dividend policy
- \( | ZX_3 - ZM | \): The absolute difference in liquidity with dividend policy
- \( \alpha \): Constants
- \( \beta_1 - \beta_6 \): Multiple regression coefficients
- \( e \): Residual value

4. Results And Discussion

1. Descriptive statistics

Descriptive statistical analysis aims to provide a description or description of a data that can be seen from the average value (mean), standard deviation, maximum and minimum [12].
2. **Classic assumption test**
   a. **Normality test**
      The normality test results show that the Asymp value. Sig. (2-tailed) of 0.200 > 0.05 which means that the data used are normally distributed in 91 data samples.
   b. **Multicollinearity Test**
      Based on the test results for all independent variables showed that the VIF value ≤ 10 and TOL ≥ 0.10, the model stated there were no symptoms of multicollinearity.
   c. **Autocorrelation Test**
      Based on table 4 shows that the Durbin-Watson value is 1.340 which means that the Durbin-Watson value is between -2 < 1.340 < +2. Thus, the regression model does not occur autocorrelation symptoms.
   d. **Heteroscedasticity Test**
      Based on the test results show that the significance value for all independent variables shows a value > 0.05. Thus, it can be concluded that the regression model does not occur symptoms of heteroscedasticity.

3. **Multiple Linear Regression Analysis**
   Based on the results of the regression analysis above, a regression equation can be arranged as follows:
   \[
   Y = 1.397 + 1.450 ZX_1 - 0.471 ZX_2 - 0.444 ZX_3 - 0.679 | ZX_1 - ZM | + 0.494 | ZX_2 - ZM | + 0.250 | ZX_3 - ZM |
   \]

4. **Model Suitability Test**
   a. **Determination Coefficient Test (R^2)**
      Adjusted R-Square value of the formed model is 0.538 or 53.8%. This shows that the independent variables, namely profitability, debt policy, liquidity, the absolute difference between profitability and dividend policy, the absolute difference between debt policy with dividend policy and the absolute difference between liquidity and dividend policy explains the variance of the company's value of 53.8% and the rest of 46.2% is explained by other variables outside the research model such as growth and size.
   b. **F-Test**
      Obtained a significance value of F of 0.000 < 0.05 and a calculated F value of 18.487 then obtained degrees of freedom: α, (k-1), (nk) or 0.05 (6-1), (91-6), then obtained Ftable amounted to 2.32 thus Fcount 18.487 > Ftable 2.32. Then it can be concluded that the regression model formed is declared fit.

5. **Hypothesis testing**

   **H1: Effect of Profitability on Company Value**
   Based on the results of the study indicate that profitability regression coefficient of 1.450 with a positive direction, thus tcount 8.626 > 1.66320 table and a significance value of 0.000 < 0.05, which means profitability has a positive and significant effect on firm value. So, it can be concluded that H1 was accepted. This is in accordance with the concept of signaling theory proposed by Ross (1977), a company that has a high profitability will give a good signal to investors because with high profitability illustrates the company's high ability to get profits, so as to increase stock demand. The results of this study are in line with research conducted by [1],[28],[19],[21].

   **H2: The Effect of Debt Policy on Company Value**
Based on research results show that debt policy regression coefficient of 0.471 with a negative direction, $t = -3.791 < t_{table} 1.66320$ and a significance value of $0.000 < 0.05$, which means that debt policy has a negative and significant effect on firm value. So, it can be concluded that $H_2$ is rejected. The results in this study indicate a negative direction which means that the higher the debt, the lower the value of the company. This can occur because based on the pecking order theory put forward by Donaldson (1984) and perfected by Myers and Majluf states that debt is a source of financing that has a high risk because bad debt management can increase the risk of bankruptcy due to non-payment of interest and debt.

**H3: Effect of Liquidity on Company Value**

Based on the results of the study indicate that liquidity regression coefficient of 0.444 with a negative direction, $t = -3.264 < t_{table} 1.66320$ and a significance value of $0.002 < 0.05$ means that liquidity has a negative and significant effect on firm value. So, it can be concluded that $H_3$ is rejected. The negative direction of the results of this study can be interpreted that the higher the level of liquidity, the lower the value of the company. The results of this study are consistent with research conducted by [11],[40].

**H4: The Effect of Dividend Policy Moderating the Relationship Between Profitability and Firm Value**

Based on the results of the study indicate that the coefficient regression absolute difference in profitability with a dividend policy of 0.679 with a negative direction, $t = -3.710 < t_{table} -1.98861$ and a significance value of $0.000 < 0.05$ means the dividend policy is able to moderate the relationship between profitability and firm value. So, it can be concluded that $H_4$ is accepted. Based on the concept of signaling theory developed by [5] states that dividends are considered able to position themselves as a means for managers to imply private information to the market and can be used as a direct means of valuing companies [12]. The results of this study are consistent with research conducted by [11], [36], and [4].

**H5: Effect of Dividend Policy Moderating the Relationship Between Debt Policy and Firm Value**

Based on the results of the study indicate that regression coefficient of the absolute difference between debt policy and dividend policy (ZDER_ZDPR) of 0.494 with a positive direction, $t = 4.132 > t_{table} 1.98861$ and a significance value of $0.000 < 0.05$ means that dividend policy is able to moderate the relationship between debt policy and company value. So, it can be concluded that $H_5$ is accepted. The existence of a dividend policy can strengthen the relationship between debt policy and corporate value. The results of this study are in line with the concept of signaling theory which states that dividend policy is able to strengthen the existence of a company's debt policy because a company that is able to distribute dividends to shareholders is considered capable of managing the company's debt policy properly. In this study have results that are consistent with research conducted by Pratiwi &

**H6: Effect of Dividend Policy Moderating the Relationship Between Liquidity and Firm Value**
Based on the results of the study, it indicates that the coefficient of absolute liquidity regression coefficient with dividend policy (ZCR_ZDPR) of 0.250 with a positive direction, t-count 1.836 <table 1.98861 and a significance value of 0.070 > 0.05 means that dividend policy is not able to moderate the relationship between liquidity and firm value. So, it can be concluded that H6 was rejected. This can happen because liquidity is a reflection of how much company funds are available to meet short-term obligations. The size of the dividends distributed will affect the size of the company's retained earnings. However, the existence of company retained earnings does not guarantee the availability of funds in the company because retained earnings may have been allocated in various types of company assets [12].

5. Conclusion

Based on the results of the analysis and discussion carried out, the following conclusions are obtained:

1. Profitability has a positive and significant effect on firm value.
2. Debt policy has a negative and significant effect on firm value.
3. Liquidity has a negative and significant effect on firm value.
4. Dividend policy is able to moderate the relationship between profitability and firm value.
5. Dividend policy is able to moderate the relationship between debt policy and corporate value.
6. Dividend policy is not able to moderate the relationship between liquidity and firm value.

References


