The Effect of Profitability, Liquidity and Leverage on Company Value with Dividend Policy as Moderating Variables on Consumer Companies Listed on the Indonesia Stock Exchange 2018-2020

Nindi Isra Sholatika¹, Triyono*²

¹ ² Faculty of Economics and Business, Universitas Muhammadiyah Surakarta
*Corresponding author. Email: tri280@ums.ac.id

ABSTRACT

Company value is a measure of the success of a company’s management in managing its operational activities to increase shareholder confidence. This study aims to analyze the effect of profitability, liquidity, and leverage as factors affecting the value of companies listed on the Indonesia Stock Exchange for 2018-2020 in consumer goods industrial sector companies. This study also examined the dividend policy variable used as a moderating variable in the research model. The population in this study is Consumer Goods Industrial Companies listed on the Indonesia Stock Exchange for 2018-2020. This study utilized secondary data and purposive sampling technique, resulting in 20 companies being selected as research samples. The data were analyzed using Multiple Linear Regression using SPSS 20. The study results revealed that profitability, liquidity, and leverage significantly affected firm value. However, profitability, liquidity and leverage moderated by dividend policy had no significant effect on firm value. Moreover, liquidity and leverage significantly influenced firm value.

Keywords: Profitability, Liquidity, Leverage, Firm Value, Dividend Policy.

1. INTRODUCTION

Competition in today’s business world has increased rapidly along with technological developments. Business activities generally aim to gain profit for their owners [1]. It triggers companies to have the ability to survive. One of the possible company’s efforts is by implementing various strategic policies to produce efficiency and effectiveness by optimizing the company’s performance.

The form of optimizing the company’s performance is by paying attention to the company’s health level to increase the ability to earn profits and avoid the potential for bankruptcy. A high company value depicts the company’s good financial performance and reflects its success, leading to the high prosperity of shareholders. The company must overcome the financial problems regarding the source of funds and their use.

The better the management and use, the better the company’s condition, attracting investors to invest their capital. Conversely, improper management and use will negatively impact firm value [2].

Financial performance reflects the company’s strategic, operating and financing decisions. Financial performance is one of the factors seen by potential investors in terms of stock investment. Maintaining and improving the company’s financial performance is highly necessary to keep the shares in demand by investors. Investors also have the right to know information about the company’s finances. The financial information contained in financial statements is useful for deciding an investor to invest [3]. Financial statements end the accounting process, aiming to provide financial information describing the company in one period. The financial information functions as a means of information, a tool for management accountability to shareholders, describing the indicators of the company’s success, and as a material consideration in decision making. One of the company’s successes factors can be seen from the increase in company value.

Firm value is crucial for investors and the public, always associated with stock market prices [4]. The higher the stock price, the higher the value of the company. High company value demonstrates the
prosperity of shareholders. Maximizing company value is vital for a company because it maximizes company goals. Increasing the company’s value is an achievement that follows the activities of its owners because by doing so, the welfare of the owners will also increase [5]. Firm value can be measured by analyzing profitability, liquidity, and leverage financial ratios. The disclosure of the financial ratios is expected to serve as a material consideration in deciding to invest and a comparison between the current and previous periods.

This study employed the company’s financial ratio analysis, including profitability, liquidity, leverage ratios with dividend policy as a moderating variable.

2. THEORIES AND HYPOTHESES

2.1. Signalling Theory

Signaling theory is the perspective of shareholders or investors regarding the company’s opportunities to provide signals to increase its value in the future [6]. It is performed to signal shareholders or investors about the company’s management in seeing its future projects to distinguish between good quality companies and bad ones [7]. Published company reports can be used as a guide for shareholders as material for consideration in making investment decisions. Company management can provide company reports to maintain investor interest.

The information issued by the company is a complete annual financial report beneficial to convey signals for shareholders to make investment decisions. The annual report serves to realize the company’s performance for the period concerned and information on the accounts in the financial statements significant to shareholders and potential shareholders. This study explains that management as the party provides signals in information about profitability, liquidity, leverage, and dividend policy as moderating for investors. The signal theory aims to influence investors’ decisions to invest in affecting firm value.

2.2. The Value of the Company

The value of the company is usually associated with its stock price, where the higher the stock price, the greater the value of the company, and the higher the prosperity of shareholders [8]. Increasing market confidence requires not only the company’s performance but also its prospects in the future. The company’s main goal is to increase its value by maximizing its share price. The value of the stock is the number of shares multiplied by the market value and added by the value of the debt, assuming that if the debt value is constant, the increase in the value of the shares will directly increase the firm value [9].

The company’s value can be measured by the share price value. The formation of the company’s share price reflects the assessment by the public of the company’s performance. Investors’ perceptions of the company’s performance and company prospects are reflected in the company’s value. If the company has good prospects in the future, the value of the shares will increase. In contrast, the share price will decrease if the company is considered unfavorable.

2.3. The Effect of Profitability on Firm Value

Profitability is the company’s ability to obtain and increase profits in its operations. The higher the level of profitability, the greater the profit generated, and the company’s value will increase, resulting in the higher dividends that shareholders will obtain. The effect of profitability on firm value follows the signal theory described previously. Management will try to get the maximum profit to improve the welfare of shareholders [10]. Signal theory indicates that the actions taken by the company’s management can provide clues to shareholders on how management sees the company’s prospects in the future.

If the value of the company increases, it implies that the company can use its assets productively and efficiently to generate maximum profits. The signal theory demonstrates a positive signal from management beneficial to picture the company’s future following the level of profitability generated, thus increasing the company’s value [11]. Research conducted by Yulandani et al. (2018), Martha et al. (2018), Patricia et al. (2018), and Puspitaningtyas (2017) discovered that profitability had a significant positive effect on firm value. Then, a hypothesis can be made:

H1: Profitability has a positive effect on firm value

2.4. The Effect of Liquidity on Firm Value

Liquidity refers to the company’s ability to meet its short-term obligations promptly. A company is said to be liquid if it can meet its short-term obligations on time because of the large number of funds available to the company to finance its operational and investment activities. Liquid companies use internal funds in their financing activities [12]. It can increase the demand for shares by potential investors, thereby increasing the share price. High stock prices reflect high firm value. Research on the effect of liquidity on firm value has been studied by Lestari (2017), Jayaningrat (2017), and Rudianto (2019), proving that liquidity had a significant positive effect on firm value. Then, a hypothesis can be made:

H2: Liquidity has a positive effect on firm value
2.5. The Effect of Leverage on Firm Value

Leverage describes the relationship between the company’s debt to capital and assets [13]. This ratio can see how far the company is financed by debt or external parties with the company’s ability as described by capital. The higher the leverage ratio, the greater the funds provided by creditors. It will make investors more careful to invest their assets because it can pose a high risk. Therefore, the company must balance how much debt is worth taking and from which sources it will be obtained to pay debts. Research conducted by Merry (2017), Indrawaty (2018), and Nurmanda et al. (2017) have proven that leverage had a significant negative effect on firm value. Therefore, a hypothesis can be made:

H3: Leverage has a negative effect on firm value

2.6. The Effect of Dividend Policy on Profitability and Firm Value

Dividends are a part of the net profit generated by the company. Hence, dividend payments are highly dependent on the income or profits generated by the company. The moderating dividend policy is expected to strengthen the effect of profitability on firm value. If investors’ expectations of getting cash dividends are realized, it will increase the company’s value. Information regarding the cash dividend payment policy contains signals tied to the company’s prospects [14]. Research on dividend policy moderating the effect of profitability on firm value was conducted by Khoiriyah (2018), Merry (2017), Ayu & Emrinaldi (2017), revealing that dividend policy could moderate the effect of profitability on firm value. Then, a hypothesis can be made:

H4: Dividend policy can moderate the effect of profitability on firm value

2.7. The Effect of Dividend Policy on Liquidity and Firm Value

Liquidity can be defined as the company’s ability to promptly pay off its short-term obligations [15]. Liquidity will affect the size of the dividend to be paid to shareholders. A high level of liquidity will influence the demand for shares and increase stock prices, resulting in a higher company’s ability to pay dividends. Research on dividend policy moderating the effect of liquidity on firm value has been investigated by Mentalita (2019), Indrawaty (2018), and Merry (2017), disclosing that dividend policy moderated the effect of liquidity on firm value. Therefore, the following hypothesis is made.

H5: Dividend policy can moderate liquidity on firm value

2.8. The Effect of Dividend Policy on Leverage and Firm Value

Leverage is a ratio to determine how much loan capital the company uses to finance its operational activities. Companies with higher debt will pose a large risk of loss, but they have a high rate of return when the economy is normal [16]. The addition of loan capital can provide a positive response because investors perceive the company to maintain cash flow in the future, which impacts increasing demand for shares and raising the stock price, increasing the company’s value. Thus, the dividends distributed to shareholders will be higher. Research on dividend policy moderating the effect of liquidity on firm value has been performed by Khoairani et al. (2018). The following hypothesis is made following the previous studies.

H6: Dividend policy can moderate leverage on firm value

3. RESEARCH METHOD

3.1. Population, Sample, and Sampling Technique

The population does not only exist in humans, animals and plants but also objects with the same characteristics [17]. The population in this study is the Consumer Goods Industrial Companies listed on the Indonesia Stock Exchange in 2018-2020. The samples were selected using purposive sampling and predetermined criteria [18]. The criteria in this study are:

1. Consumer Companies that publish complete annual financial statements and end on December 31 from 2018-2020
2. Consumer companies that publish complete annual financial statements in Rupiah during the research year
3. Consumer Companies that earn positive profits and distribute dividends in 2018-2020

From the population of 53 companies, 20 were selected as the sample. This study utilized secondary data obtained from the IDX by researching on.

1. Summary of annual financial statements and other data
2. Company profile contains complete annual financial statements and a brief history of related companies.
These research data were sourced from the annual financial reports and company profiles of consumption companies listed on the BES from 2018 to 2020.

3.2. Operationalization and measurement variables

**Firm Value (Dependent Variable/Y)**

The measurement of firm value utilized the Price Book Value (PBV) formula. PBV is a ratio to measure the financial effectiveness of the company’s management and organization as a company that continues to grow. The PBV ratio can be determined by dividing the stock price by the book value [19].

**Independent Variable**

a) Profitability (X1)

Profitability is the ability of a company to earn a profit through its capital or from sales. Profitability measurement applied the Return On Asset (ROA) formula. ROA is a profitability ratio that describes the speed of operating assets in a certain period. ROA can be determined by dividing net income by total assets.

b) Liquidity

Liquidity is the company’s ability to manage its short-term liabilities by looking at its current assets relative to its current liabilities (debt, in this case, is the company’s liability). The Cash Ratio was employed to measure liquidity in this study. Cash Ratio is a comparison between current assets and current liabilities.

c) Leverage

Leverage is a ratio to determine how much the company is financed by debt or other parties [20]. The measurement of leverage in this study applied the Debt to Equity Ratio (DER) formula. DER is a comparison between total debt and company equity used as a source of business funding.

**Moderating Variable (Dividend Policy/Z)**

The moderating variable can strengthen and weaken the relationship between the independent and the dependent variables. The measurement of dividend policy utilized the Dividend Payout Ratio (DPR) formula. DPR describes the amount of profit from each share allocated in dividends.

3.3. Data Analysis Technique

Multiple linear regression analysis was performed to test the hypothesis, stating the existence of the independent variable on the dependent variable. The multiple regression analysis equation model for this research is:

\[
Y = a + 1X1 + 2X2 + 3X3 + 1X1Z + 2X2Z + 3X3Z + £
\]

\[
= -3.423 + 53.080 X1 + 0.372 X2 + 2.627 X3 - 1.811X1Z + 0.072 X2Z + 2.302 X3Z + 0.207
\]

Description:

\[
Y = \text{Firm Value (PBV)}
\]

\[
A = \text{Constant}
\]

\[
X1 = \text{Profitability (ROA)}
\]

\[
X2 = \text{Liquidity (Cash Ratio)}
\]

\[
X3 = \text{Leverage (DER)}
\]

\[
Z = \text{Dividend Policy (DPR)}
\]

\[
X1Z = \text{Interaction between profitability and dividend policy}
\]

\[
X2Z = \text{Interaction between liquidity and dividend policy}
\]

\[
X3Z = \text{Interaction between leverage and dividend policy}
\]

\[
£ = \text{Error}
\]

4. RESULTS AND DISCUSSION

4.1. Data Normality Test Results

The normality test aims to determine whether in the regression model the dependent variable and the independent variable are both normally distributed or not. Using the non-parametric Kolmogorov-Smirnov (KS) test, the data are normally distributed if the significance value is > 0.05. Based on this study, the significant value in the first test was 0.804, and the significance value after a moderating variable was 0.690 (more than 0.05). In other words, the data were normally distributed.

4.2. Classical Assumption Test Results
**Multicollinearity Test**

The multicollinearity test aims to determine whether there is a correlation between the independent variables in the regression model. There is no multicollinearity if the VIF value is < 10 and the tolerance value is > 0.10. In this study, all independent variables in the first test had a VIF value, namely ROA of 0.991, Cash Ratio of 0.904, and DER of 0.906 < 10. The tolerance value obtained ROA of 1.009, Cash Ratio of 1.107, and the DER of 1.104, greater than 0.10. To sum up, there was no multicollinearity.

**Heteroscedasticity Test**

The heteroscedasticity test aims to identify whether in the regression there is an inequality of variance from the residuals of one observation to another observation. To determine the existence of heteroscedasticity, Spearman’s Rank Test was applied with a significance value criterion of > 0.05. Hence, the data did not occur heteroscedasticity, meaning that the data passed the test. In this study, the significance value obtained ROA of 0.233, Cash Ratio of 0.873, and DER of 0.745 > 0.05. In conclusion, there was no heteroscedasticity.

**Autocorrelation Test**

The autocorrelation test aims to identify whether in the linear regression model there is a correlation between the confounding error in period t and the error in period t-1. If there is a correlation, there is an autocorrelation problem. To determine the symptoms of autocorrelation, the Durbin-Watson test (DW) was run, the results acquired a value between -2 to +2, indicating no autocorrelation.

The DW obtained a value of 1.180 (between -2 to +2), signifying no autocorrelation.

### 4.3. Hypothesis Testing

<table>
<thead>
<tr>
<th>Variable</th>
<th>Beta</th>
<th>t</th>
<th>Sig</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1</td>
<td>54.28</td>
<td>13.485</td>
<td>0.000</td>
<td>H1 Accepted</td>
</tr>
<tr>
<td>X2</td>
<td>-0.392</td>
<td>-2.417</td>
<td>0.019</td>
<td>H2 Accepted</td>
</tr>
<tr>
<td>X3</td>
<td>3.561</td>
<td>3.854</td>
<td>0.000</td>
<td>H3 Accepted</td>
</tr>
</tbody>
</table>

R2: 0.791

F Count: 66,550 with Sig.: 0.000

**Table 1 Equation 1 Hypothesis Testing**

These results of hypothesis testing imply that:

1. **Hypothesis 1**
   
   The significance value of the profitability variable is 0.000 < 0.05. Thus, H1 is accepted, and profitability affects firm value.

2. **Hypothesis 2**
   
   The significance value of the liquidity variable is 0.019 < 0.05; H2 is accepted, and liquidity affects firm value.

3. **Hypothesis 3**
   
   The significance value of the leverage variable is 0.000 < 0.05. Hence, H3 is accepted, and leverage influences firm value.

4. **Hypothesis 4**
   
   The significance value is 0.902 < 0.05; H4 is rejected, and dividend policy is not able to moderate profitability on firm value.

5. **Hypothesis 5**
   
   The significance value is 0.858 < 0.05. Hence, H5 is rejected, and dividend policy is not able to moderate leverage on firm value.

6. **Hypothesis 6**
   
   The significance value is 0.528 < 0.05; H6 is rejected, and dividend policy is not able to moderate leverage on firm value.

The coefficient of the determinant test resulted in 0.783 or 78.3%. These results indicate that 78.3% change in firm value was influenced by ROA, Cash Ratio, DER, ROA_DPR, Cash Ratio_DPR, and DER_DPR, while other factors affected the remaining 21.7%.

**Table 2 Equation 2 Hypothesis Testing**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Beta</th>
<th>t</th>
<th>Sig</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1</td>
<td>53.080</td>
<td>4.079</td>
<td>0.000</td>
<td>H1 Accepted</td>
</tr>
<tr>
<td>X2</td>
<td>-0.372</td>
<td>-1.686</td>
<td>0.099</td>
<td>H2 Rejected</td>
</tr>
<tr>
<td>X3</td>
<td>2.627</td>
<td>1.395</td>
<td>0.170</td>
<td>H3 Rejected</td>
</tr>
</tbody>
</table>
5. DISCUSSION

5.1 The Effect of Profitability on Firm Value

Following the results of the hypothesis testing in Table 1, the significance value is 0.000 < 0.05; H1 is accepted, and profitability affects firm value. It means that high profitability can provide added value for the company, reflected in the value of its shares.

The results of this study are in line with research conducted by Yulandani et al. (2018), Martha et al. (2018), Patricia et al. (2018), and Puspitaningtyas (2017), displaying that profitability had a significant positive effect on firm value.

5.2 Effect of Liquidity on Firm Value

The hypothesis testing obtained a significance value of 0.019 < 0.05; H2 is accepted, and liquidity affects firm value. It implies that the higher the liquidity value, the greater the company’s value. Conversely, the lower the liquidity, the lower the company’s value. High cash capacity affects the ability to pay short-term obligations of the company; thus, having a positive impact on firm value.

The results of this study are in line with research conducted by Lestari (2017), Jayaningrat (2017), and Rudianto (2019), proving that liquidity significantly and positively affected firm value.

5.3 The Effect of Leverage on Company Value

The significance value is 0.000 < 0.05. Hence, H3 is accepted, and leverage affects firm value. It signifies that with debt, other parties participate in overseeing the performance of the company’s management, namely creditors, not only shareholders as principals who oversee its performance. The more people who supervise, the less opportunity for management to take actions that can harm the company. It can be considered positively by investors who believe that the company can increase firm value.

The results of this study are not in line with research conducted by Nurminida (2017), Indrawaty (2018), and Mery (2017), uncovering that leverage had a significant negative effect on firm value.

5.4 The Effect of Dividend Policy on Profitability and Firm Value

Having a significance of 0.902 < 0.05, H4 is rejected, and dividend policy is not able to moderate profitability on firm value.

In short, the company has good performance in managing its assets to generate high profitability. Instantly, it will affect the company’s high value, indicating that the use of external funds can be reduced by the company having more internal funds. The company has high profitability allowing shareholders to get profits in dividends and reducing the company’s obligation to pay interest.

The results of this study are not in line with research conducted by Khoiriyah (2018), Mery (2017), Ayu & Emrinaldi (2017), discovering that dividend policy moderated the effect of profitability on firm value.

5.5 The Effect of Dividend Policy on Liquidity and Firm Value

The significance value of 0.858 < 0.05 causes H5 to be rejected, and dividend policy can moderate liabilities on firm value. It means that dividend policy is not able to increase firm value when liquidity is high, and dividend policy cannot reduce firm value when liquidity is low.

These results are different from those of Mentalita (2019), Indrawaty (2018), and Mery (2017), disclosing that dividend policy could moderate the effect of liquidity on firm value.

5.6 The Effect of Dividend Policy on Leverage and Firm Value

With a significance value of 0.528 < 0.05, H6 is rejected, and dividend policy cannot moderate leverage on firm value. Using higher debt will benefit from saving on tax payments and increase profits per share that shareholders will receive.

Negative impacts can also be generated from too high debt, namely, not being able to pay debts because the consequences of interest and principal are too high beyond the benefits of the debt itself. Hence, it decreases the company’s value.
The results of this study do not support the research conducted by Khairani et al. (2018), Burhanuddin & Nuraini (2018), and Riska (2020), revealing that dividend policy could strengthen the relationship between leverage and firm value.

6. CONCLUSION

The interpretation of this research is as follows:

1. Profitability affects the firm value.
2. Liquidity affects the firm value.
3. Leverage affects the firm value.
4. Dividend policy is not able to moderate profitability to firm value.
5. Dividend policy is not able to moderate liquidity to firm value.
6. Dividend policy is not able to moderate leverage on firm value.

Suggestions for further research include adding or replacing independent variables that have not been studied and using moderating variables with a more, profitability and intellectual capital, and increase the research period.

REFERENCE


