Analysis of the Factors Affecting the Firm Value with Dividend Policy as a Moderating Variable in Banking Companies Listed on the Indonesia Stock Exchange 2013-2019

Muhammad Ardiansyah¹, Erlina¹, Rujiman¹

¹Department of Accounting, Faculty of Economics and Business at Universitas Sumatera Utara, Indonesia

Corresponding Author: Muhammad Ardiansyah

ABSTRACT

This study analyzes the effect of liquidity, profitability, firm size, capital adequacy ratio, growth, and Indonesian interest rates on firm value with dividend policy as a moderating variable. This study's population was 43 banking companies listed on the Indonesia Stock Exchange with the 2013 to 2019 observation years. The sample was 112 and selected using the purposive sampling method. The data were processed using the panel data regression statistical test method. This study indicates that liquidity, profitability, firm size, and capital adequacy ratio have a positive and significant effect on firm value. In contrast, growth and interest rates in Indonesia have a positive and insignificant effect on firm value. Dividend policy cannot moderate the effect of liquidity, profitability, firm size, capital adequacy ratio, growth, and Indonesia's interest rates on firm value.

Keywords: liquidity, profitability, firm size, capital adequacy ratio, growth, Indonesian interest rates, dividend policy, firm value.

INTRODUCTION

The goal of corporate financial management is to maximize shareholder wealth. The value of wealth can be seen by developing the company's share price (common stock) in the market. Firm value can be measured through the value of the stock price in the market, based on the formation of the company's stock price in the market, which reflects the public's assessment of the company's real performance. In real terms, the market price formation is a meeting point of a stable power of demand and supply prices. Buying and selling securities in the capital market between sellers (issuers) and investors are often referred to as market equilibrium. Therefore, in the capital market's financial theory, the stock price in the market is referred to as the concept of firm value (Harmono, 2011).

The higher the firm value, the more prosperous the company owner is. Achievement of financial manager goals in maximizing firm value can be seen and measured from the company's stock price (Kasmir, 2010). The rise and fall of stock prices in the market is an exciting phenomenon to discuss regarding the ups and downs of the value of the company itself. From the share price, it is clear that the condition of the firm value can be seen. Stock price fluctuations generally occur in companies listed on the Indonesia Stock Exchange, which can be seen in the following figure:

The stock price is essential for a company because it reflects its value and a good enough stock price condition will encourage investors to invest in a company. To find out the high or cheap stock price of a company, one can use the price book value (PBV) indicator, which compares the stock price and the book value per share (book value per share). With this PBV ratio, investors can immediately know how many times the stock market value has been valued from its book value. This ratio can provide an overview of the potential price movements of a share so that from this description, indirectly, this PBV ratio also influences stock prices.

The higher the PBV value, the more successful the company is in creating value or prosperity. The better the financial performance of a company, the better the firm value. The higher the firm value, the more prosperous the investor will be. The higher the PBV value means that the market has confidence in the company's condition or prospects in the future. This PBV also gives a signal to investors about whether the share price is high or low. If it is assumed that the company will go bankrupt (bankruptcy immediately), because if the company goes bankrupt, then the primary obligation of the company is to pay the debt first. Then the remaining company assets are distributed to shareholders.

A company with high liquidity shows that the company is in a healthy financial condition. The higher of liquidity, the higher of firm value because the market will react positively. Liquidity is defined as a company's ability to meet its financial obligations in the short term or to be paid immediately (Mamdul, 2004). Bank liquidity is the ability of a bank to pay off its short-term debt with its current assets. Customer deposits can be withdrawn at any time. Therefore the bank must always maintain its liquidity so that when a customer makes a withdrawal, the funds can be available and do not disturb the bank's liquidity.

The bank's ability to meet the possibility of withdrawing deposits and other liabilities and to meet public needs in the form of credit and other fund placements is about bank liquidity. This ratio can be used to measure how liquid a company is. If the company can fulfill its obligations, it means that the company is liquid. In contrast, if the company cannot fulfill its obligations, it means that the company is liquid. Investors expect high returns and do not want the risk of investing. Investors will only invest in sectors that have a low level of risk. The condition of the company's performance that gives a positive signal means that the company's shares will be in demand by every investor to increase the
share price. The firm value will also increase.

Conversely, if the company's performance gives a negative signal, it will show bad prospects in the future to cause a decrease in share prices in the capital market and a decrease in firm value. This theory is in line with the research of Tui et al. (2017) that liquidity has a significant effect on Firm Value. The results of this study are in line with Fajaria (2018) and Fadli (2013). But the results of this study are not in line with Antwi et al. (2012), Gregorius (2017), Aldi et al. (2020), and Mahendra (2012).

Profitability is one of the factors that support firm value. Return on assets (ROA) is a profitability ratio that measures its ability to generate profits from the assets used. The greater the ROA value, the better its performance because the return on investment is more excellent. This value reflects the company's return from all assets (or funding) given to the company (Wild et al., 2005). ROA can be used to evaluate whether management has received an adequate return (reasonable return) from the assets it controls. This ratio is one of the benchmarks in evaluating how well the company has used its funds. ROA can measure the company's ability to generate profits in the past to be projected in the future. Quite a lot of research on profitability has been done. Purwohandoko (2017) concluded that profitability (ROA) has a significant positive effect on firm value (PBV). This research is in line with Tui et al. (2017), Mahendra et al. (2012), and Aldi et al. (2020). This study's results are not in line with Antwi et al. (2012) and Maimunah (2019).

Firm size is one of the factors that influence firm value. The financial condition of companies with large total assets will be healthier, more stable operations, and relatively profitable so that the company's prospects in the future will be better. Company management can control and utilize existing assets in large companies to achieve company goals and increase the company's operational activities, so investors will respond positively to investing so that the firm value will increase. Tui et al. (2017) show that firm size has a positive effect on firm value. This study's results are in line with Purnomosidi et al. (2014) and Lestari (2016). But the results of this study are not in line with Hazlina (2015), Gregorius (2017), and Purwohandoko (2017).

In banking capital, it can be seen from the bank's Capital Adequacy Ratio (CAR). CAR is an indicator of a bank's ability to cover the decline in its assets due to bank losses caused by risky assets (Dendawijaya, 2009). The higher the CAR, the better its ability to bear the risk of any credit or risky earning assets. So it can be concluded that CAR is the bank's ability to maintain sufficient capital and bank management's ability to identify, measure, supervise and control risks that arise that can affect the amount of bank capital. And from the CAR, investors can see how the company carries out its operational activities. Currently, CAR in Indonesian banking companies has fluctuated from year to year. The increase and decrease in CAR is a condition of the company, which reflects the firm value, and is one of the benchmarks for investors in investing in the company. The condition of CAR, which has increased and decreased, is the success of a banking company in carrying out its company's performance, and this will give a positive signal so that it will have an impact on the value of the company so that investors will be interested in investing in the company. The higher the CAR value, the healthier the bank's performance will be. However, a too high CAR can cause idle funds to get bigger, causing the bank's financial performance to decline and the firm value to decline. And the lower the CAR value indicates the bank is unhealthy and will reduce its value (Yuliati & Zakaria, 2014). Research conducted by Hidayat (2014), Sundari (2019), and Halimah (2017) states that CAR has a positive effect on firm value. But the results of this study are not in
Muhammad Ardiansyah et.al. Analysis of the factors affecting the firm value with dividend policy as a moderating variable in banking companies listed on the Indonesia Stock Exchange 2013-2019.

line with Maimunah (2019) and Fatima (2020).

Also, company growth is one of the factors that affect firm value. Company growth opportunities reflect a company's productivity and the opportunity expectations for internal companies, investors, and creditors to profit. Companies that have growth can be seen in their assets. Company growth is the impact of company funds' flow from operational changes caused by growth or decrease in business volume (Helfert, 1997). The company's growth is considered capable of influencing its value because profitable growth is a sign of its development. From an investor's point of view, the company's growth signifies that the company has beneficial aspects, and investors will expect a rate of return on the investment made. In general, when a company experiences growth, the expectation of future earnings and share prices will also increase (Chowdhury & Chowdhury, 2010). The greater the assets, the more excellent the company's opportunity to profit from its operations results. It shows that the company is experiencing good development and growth. This development and growth will show investors that the company has good prospects, which will attract investors to invest. The more investors who invest, the stock price will increase, so that the increase in share price will affect increasing firm value. Research conducted by Hazlina (2015) states that company growth affects firm value. This result is in line with (Fajaria 2018).

Another factor affecting firm value is external factors; external factors used in this study are Indonesian Interest Rates. According to (Karl E. Case & Fair. Ray C, 2001), the interest rate is the annual interest payment of a loan, in the form of a percentage of the loan obtained from the amount of interest received each year divided by the amount of the loan. Several aspects that can explain the phenomenon of high-interest rates in Indonesia are related to the banking sector's performance. Which functions as an intermediary institution (intermediary), society's habit of associating and utilizing various bank services is still relatively low, and it is challenging to reduce rates bank interest when the inflation rate is always high. Interest is an essential measure of resources used by debtors that are paid to creditors. Also, the interest rate is the loan's cost or the price paid for these loan funds. At a more general level, interest rates impact the health of the economy as a whole because interest rates are not only can affect consumers' willingness to consume or save but business investment decisions (Mishkin, 2008). Research on Indonesia's interest rates on firm value has been widely conducted. The research results from Meidiana (2019) and Sudiarto (2015) state that Indonesia's interest rates have a positive effect on firm value. Still, the results of this study are not in line with the results of research by Noerirawan & Muid (2012), Rakhimsyah (2011), and Tendelilin (2010).

Dividend policy (dividend policy) is a decision whether the company's profits at the end of the year will be distributed to shareholders in the form of dividends or will be retained to increase capital for future investment financing (Harjito & Martono, 2012). In the Bird in The hand theory from Lintner (1956) and Bhattacharya (1979), it is explained that investors like high dividends and are a complementary view of firm value. The reason is simple, namely because dividends are cash that is certain to be received at this time, in contrast to capital gains, which are still in the form of expectations and results of managing retained earnings. Based on the Bird in Hand theory, dividend policy has a positive effect on stock market prices. If the dividends distributed by the company are getting bigger, the market price of the company's shares will be higher and vice versa. It occurs because dividend distribution can reduce the uncertainty faced by investors (Lintner, 1956). In dividend relevance theory shows a direct relationship between a company's dividend policy and its market value. In this case, the high
dividend, the stock price will tend to be high, and so will the firm value, conversely if the dividend is low, the stock price will also tend to be low, and the firm value will be low. In the bird in the hand theory, it is stated that investors prefer dividends. Investors feel more secure in earning income in dividend payments than waiting for capital gains that may not be obtained in the future. The hope with dividend distribution is that the stock price will increase, and eventually, the firm value will also increase. Meanwhile, in the theory of dividend irrelevance by Miller & Modigliani (2016), it is stated that dividend policy does not affect firm value. According to MM, the increase in firm value is influenced by the company's ability to get profit or earning power from the company's assets.

Several previous studies have researched by testing various models to explain dividend policy as a moderating variable related to the factors that affect firm value and the occurrence of differences in these studies' results. In research by Mahendra (2012), it is said that dividend policy cannot moderate the effect of liquidity on firm value. Research by Fadli (2013) states that dividend policy can moderate liquidity on firm value. Besides, research by Chowdhury & Chowdhury (2010) states that dividend policy can moderate the effect of firm size on firm value. However, Purwohandoko's research (2017) states that dividend policy cannot moderate the effect of firm size on firm value. Research conducted by Fadli (2013) states that dividend policy can moderate the effect of profitability on firm value. In contrast to Mahendra's (2012) research, which states that dividend policy cannot moderate the effect of profitability on firm value. Fatima (2020) and Halimah (2017) proves that dividend policy can moderate the effect of capital adequacy ratio on firm value. Hazlina (2015) and Fajaria (2018) proves that dividend policy can moderate the effect of company growth on firm value.

Framework

Following the description of the background of the problem, literature review, and previous research, a conceptual research framework is prepared as follows:

```
H1: Liquidity has a positive effect on firm value.
H2: Profitability has a positive effect on Firm Value
H3: Firm Size has a positive effect on Firm Value
H4: Capital Adequacy Ratio has a positive effect on Firm Value
H5: Growth has a positive effect on Firm Value
H6: Interest Rate has a positive effect on Firm Value
H7: Dividend Policy able to moderate Liquidity with Firm Value
H8: Dividend Policy able to moderate Profitability with Firm Value
H9: Dividend Policy able to moderate Firm Size with Firm Value
H10: Dividend Policy able to moderate CAR with Firm Value
H11: Dividend Policy able to moderate Growth with Firm Value
H12: Dividend Policy able to moderate Interest Rates with Firm Value
```

other variables. The data analysis method used in this study is a statistical analysis method using Eviews10 software. Data analysis performs by testing standard assumptions and testing hypotheses.

The population used in this study is 112 banking companies listed on the Indonesia Stock Exchange during the 2013-2019 period. The sampling technique used in this study was purposive sampling.

RESULT AND DISCUSSION

Table 3.1 Multicollinearity Test

<table>
<thead>
<tr>
<th></th>
<th>LDR</th>
<th>ROA</th>
<th>UKPER</th>
<th>CAR</th>
<th>GRO</th>
<th>SBI</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDR</td>
<td>1.00</td>
<td>0.10</td>
<td>0.34</td>
<td>0.16</td>
<td>0.06</td>
<td>-0.07</td>
</tr>
<tr>
<td>ROA</td>
<td>0.10</td>
<td>1.00</td>
<td>0.16</td>
<td>0.30</td>
<td>0.01</td>
<td>0.07</td>
</tr>
<tr>
<td>UKPER</td>
<td>0.34</td>
<td>0.16</td>
<td>1.00</td>
<td>0.02</td>
<td>0.15</td>
<td>0.08</td>
</tr>
<tr>
<td>CAR</td>
<td>0.16</td>
<td>0.30</td>
<td>0.02</td>
<td>1.00</td>
<td>-0.01</td>
<td>0.34</td>
</tr>
<tr>
<td>GRO</td>
<td>0.06</td>
<td>0.01</td>
<td>0.15</td>
<td>-0.01</td>
<td>1.00</td>
<td>0.21</td>
</tr>
<tr>
<td>SBI</td>
<td>0.07</td>
<td>0.07</td>
<td>0.08</td>
<td>-0.34</td>
<td>0.21</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Source: EViews 10 Software Results

Based on Table 3.1, the multicollinearity test results show that there are no multicollinearity symptoms between the independent variables. The correlation value between the independent variables is not more than 0.9 (Ghozali, 2013).

Estimation Model Determination

Common Effect Model (CEM) and Fixed Effect Model (FEM) with the Chow Test.

Table 3.2 Estimation Model Results with Chow Test

<table>
<thead>
<tr>
<th>Effects Test</th>
<th>Statistic</th>
<th>d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section F</td>
<td>1.926890</td>
<td>(15,90)</td>
<td>0.0304</td>
</tr>
<tr>
<td>Cross-section Chi-square</td>
<td>31.192144</td>
<td>15</td>
<td>0.0083</td>
</tr>
</tbody>
</table>

Source: EViews 10 Software Results

Based on the results of the Chow test in Table 3.2, it is known that the probability value is 0.0083. Because the probability value is 0.0083 <0.05, the estimation model used is the fixed effect model (FEM) model.

Fixed Effect Model (CEM) and Random Effect Model (REM) with Hausman Test

Table 3.3 Results of the Hausman Test

<table>
<thead>
<tr>
<th>Test Summary</th>
<th>Chi-Sq. Stat</th>
<th>Chi-Sq. d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-sec ran</td>
<td>19.264079</td>
<td>6</td>
<td>0.0037</td>
</tr>
</tbody>
</table>

Source: EViews 10 Software Results

Based on the results of the Hausman test in Table 3.3, it is known that the probability value is 0.0037. Because the probability value is 0.0037 <0.05, the estimation model used is the fixed effect model (FEM) model.

Hypothesis Testing Results

Table 3.4 Regression Equations

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Stat</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDR</td>
<td>0.015142</td>
<td>0.006684</td>
<td>2.265610</td>
<td>0.0259</td>
</tr>
<tr>
<td>ROA</td>
<td>0.15610</td>
<td>5.059689</td>
<td>2.007257</td>
<td>0.0477</td>
</tr>
<tr>
<td>UKPER</td>
<td>0.257596</td>
<td>0.060091</td>
<td>4.286750</td>
<td>0.0000</td>
</tr>
<tr>
<td>CAR</td>
<td>4.549509</td>
<td>1.995582</td>
<td>2.279790</td>
<td>0.0250</td>
</tr>
<tr>
<td>GRO</td>
<td>0.399397</td>
<td>0.461800</td>
<td>0.864870</td>
<td>0.3894</td>
</tr>
<tr>
<td>SBI</td>
<td>0.040619</td>
<td>0.081006</td>
<td>0.501435</td>
<td>0.6173</td>
</tr>
<tr>
<td>C</td>
<td>-10.81177</td>
<td>2.018798</td>
<td>-5.355548</td>
<td>0.0000</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.488978</td>
<td>Mean dependent var</td>
<td>-0.000666</td>
<td></td>
</tr>
<tr>
<td>Adj R²</td>
<td>0.369739</td>
<td>S.D. dependent var</td>
<td>0.990442</td>
<td></td>
</tr>
<tr>
<td>S.E. of reg</td>
<td>0.773863</td>
<td>Akaike info crit</td>
<td>2.510920</td>
<td></td>
</tr>
<tr>
<td>Sum of sq</td>
<td>54.526 37</td>
<td>Schwarz criterion</td>
<td>3.44911</td>
<td></td>
</tr>
<tr>
<td>Log Ldh</td>
<td>-118.6115</td>
<td>Hannan-Quinn crit</td>
<td>2.725777</td>
<td></td>
</tr>
<tr>
<td>F-stat</td>
<td>4.100835</td>
<td>Durbin-Watson stat</td>
<td>2.080693</td>
<td></td>
</tr>
<tr>
<td>Prob(F-stat)</td>
<td>0.000001</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: EViews 10 Software Results

Based on Table 3.4, it can be concluded that liquidity, profitability, firm size, and capital adequacy ratio have a significant effect on firm value partially, while growth and Indonesia’s interest rate has no significant effect on firm value partially.

Table 3.4 shows that the Adjusted R Square value is 0.369739 or 36.98%, which means the influence of independent variables (liquidity, profitability, firm size,
Muhammad Ardiansyah et.al. Analysis of the factors affecting the firm value with dividend policy as a moderating variable in banking companies listed on the Indonesia Stock Exchange 2013-2019.

capital adequacy ratio, growth, and Indonesian interest rates) can explain the firm value of 36.98%. In comparison, the remaining 63.02% is explained by other variables not included in this research model: corporate social responsibility, corporate governance, managerial ownership, audit committee, independent commissioner, etc.

Based on Table 3.5, it can be concluded that the dividend policy cannot moderate liquidity, profitability, firm size, capital adequacy ratio, growth, and Indonesia's interest rates on firm value partially.

**CONCLUSION**

Based on the results of data analysis and research discussion, the following conclusions can be drawn:

1. Liquidity has a positive and significant effect on firm value.
2. Profitability has a positive and significant effect on firm value.
3. Firm size has a positive and significant effect on firm value.
4. Capital Adequacy Ratio has a positive and significant effect on firm value.
5. Growth has a positive and insignificant effect on firm value.
6. Indonesian interest rates have a positive and insignificant effect on firm value.
7. Dividend policy cannot moderate the effect of the liquidity relationship on firm value.
8. Dividend policy cannot moderate the effect of profitability on firm value.
9. Dividend policy cannot moderate the effect of the relationship between firm size and firm value.
10. Dividend policy cannot moderate the effect of the capital adequacy ratio on firm value.
11. Dividend policy cannot moderate the effect of the relationship between growth and firm value.
12. Dividend policy cannot moderate the relationship between Indonesia's interest rates and firm value.

**REFERENCES**


How to cite this article: Muhammad Ardiansyah, Erlina, Rujiman. Analysis of the factors affecting the firm value with dividend policy as a moderating variable in banking companies listed on the Indonesia Stock Exchange 2013-2019. International Journal of Research and Review. 2020; 7(12): 81-89.

*****