THE IMPACT OF LIQUIDITY, PROFITABILITY, AND LEVERAGE ON FIRM VALUE WITH DIVIDEND POLICY AS MODERATING VARIABLE

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ABSTRACT
This research has the purpose to determine the impact of liquidity, profitability, and leverage on firm value, with dividend policy as the moderating variable. The secondary data from the manufacturing company such as financial statements and annual reports listed on IDX from 2017 – 2019 are used for this research. Research method using moderated regression analysis, which is tested using E.views. This study uses fixed effect model in testing hypothesis. Samples are chosen based on purposive sampling method. From 2017 to 2019, 42 manufacturers are listed on IDX, with a total of 126 dates selected as samples. This study found that liquidity and leverage have the negative and insignificant impacts on firm value, profitability has positive and significant impact on firm value, dividend policy is not able to moderate impact of liquidity and leverage on firm value, and dividend policy is able to weaken the impact of profitability on firm value.

Keyword: liquidity; profitability; leverage; dividend policy; firm value

1. INTRODUCTION

Business competition in Indonesia is intensifying rapidly. This phenomenon can be seen in the Composite Stock Index (CSPI), which surpassed 6,000 in 2017 [1] from 5,296 in the previous year [2]. In 2018, JCI ended at the level of 6,194 [3] and rose again to the level of 6,299 [4] in 2019. This leads to fierce competition between companies to raise funds, and they need to perform at their best to attract investors and invest in them. The capital provided by investors will be useful for companies in achieving their goals and increasing their firm value, which leads to the well-being and prosperity of its shareholders. According to Putra and Wiagustini [5], the measure for the value of the firm is the traded stock’s price. Therefore, the higher the value of the firm is, the better the well-being of the owners and shareholders, it can be depicted from the stock price of the company. To be sure, management must be at its best to achieve good corporate value. Financial performance can be obtained from information about the financial ratio in the company's financial statements [6]. These ratios are used by investors to analyze the prospects of a company before deciding to invest. Several previous studies have shown that there are factors that influence corporate value, such as liquidity, profitability, size, investment opportunities, leverage, growth, and dividend policy. However, this study used only liquidity, profitability, and leverage, and dividend policy is used as the moderating variable. Liquidity is a one of measurement tools to know the company's ability to pay or fulfil short-term debt when it is due [7].

The company with good financial condition can be seen from their high liquidity, because it indicates the ability of the company to pay short-term debt from the company’s working capital, thus give investor confidence on the company's dividend capacity. The other dependent is profitability, which is ability of the company to earn profits from sales, total assets, or its capital [9]. High profitability indicates that the firm's profits, which are distributed as dividends, are high, which to increase investor interest in investing and also to increase its value [10]. Another
factor that can affect a value of the firm is leverage. Leverage is the use of debt capital as a source of funding for a company to do business [11]. High leverage increases a company's risk, and this makes investors hesitate to provide capital for the company, it is affecting in decreasing the company's value [12]. Dividend policy is made by the management to decide whether to distribute profits to shareholders or retain them as retained earnings [13].

This study uses dividend policy to find out if dividend policy is able to strengthen or weaken the impact of the dependent variables in this research on firm value. This is because the dividend policy has attracted the attention of potential investor or other outside parties who are interested to know the information about the company’s condition [14]. The amount of cash dividends paid to shareholders can affect corporate value, which is estimated at stock prices over a period of time [15]. If the cash dividend is paid higher, the higher the corporate value as it tends to encourage the rise in stock prices [15]. In addition, dividend policy is often used by the investors as a sign to assess whether the company has good financial performance or not, the higher the dividend policy, the signal will be more positive and vice versa because basically the purpose of investors to invest is to get a high return. In this study, researchers chose the manufacturing industry as the object of research.

The manufacturing industry is one of the main drivers of domestic economic growth. Manufacturing industry sector has contributed the Gross Domestic Product (GDP) in 2019 reached 17.58% [16]. The other reason why there are so many investors who has a big interest to invest in this sector because the production in this sector is an important product needed by the community such as food, beverages, textiles, automotive, cement, medicines, and other daily products so that they have good prospects. In addition, investors are also interested in the manufacturing sector because Indonesia has a large market potential and abundant raw materials.

2. RESEARCH METHOD

This theory explains the point of view of the investors about a company's ability to increase future shareholder value [17]. Investors use the indicators contained in the financial statements to assess a company’s ability to increase shareholder value. Because the information is complete, relevant, accurate, and up-to-date, the company's financial statements are used as an analysis tool for investment decisions [18]. Therefore, the company strives to provide the best performance to increase its corporate value. This measure is taken to give a good signal that investors are looking at the company's outlook [19].

Hariyawan [20] explains that agency theory describes the relationship between two parties, an agent performing a specific task for a principal (shareholder) and a principal, that is, a party that rewards the agent (manager). Claims that. Therefore, agents are responsible for properly and optimally managing the resources they own for the benefit of the principal. The main goal of a company is to create high shareholder value in order to increase and maximize the well-being and wealth of owners and shareholders. However, in reality, there are different goals and interests in the relationship between principals and agents. Agents want to use their profits as retained earnings for future business growth, and principals want to maximize their assets by paying dividends. This difference in the interests of the agent and the principal causes a problem known as information asymmetry [21].

Investors prefer companies that distributes high dividends because basically the investor’s main purpose of the investment is to get profit in the form of dividends. High dividends will cause
the stock price to rise, which affects the value of the firm [22]. Investors want to have pigeons in their hands rather than a thousand pigeons in the air. In short, investors prefer companies that pay more dividends for security than capital gains.

Firm value depicts the value of a company that generates future profits and is reflected in market value [23]. Meanwhile, according to Maryam et al. [19] Corporate value represents the price per share that a company offers to investors and reflects the company's current development and future outlook. We can conclude that firm value is the point of view from investor about the future performance and outlook of the company, as illustrated by the price of the shares offered.

Definition of liquidity by Kieso et al. [7] is a measure of a company's ability to pay short-term debt when it is due. On the other hand, according to Brigham and Houston [17], liquidity reflects the ratio of a company's current assets to its current liabilities and the ability of the firm to repay their debt at its maturity. From the above two definitions, we can conclude that liquidity is the ability of a company to pay its obligations using the company’s current assets.

Profitability is a measurement tool to know a company's success or failure over a particular time period [7]. On the other hand, according to Sumanti and Mangantar [9], profitability is used to know the how good or bad the ability of a company to earn profits from sales, total assets, or capital. From various definitions, we can conclude that profitability is a measure based on the profits it earns from sales and return on investment to know the company’s success.

Leverage is a measure to know how much debt is used for the source of the company to run their business, and the company must pay a fixed cost to use it [11]. On the other hand, according to Kanta et al. [12] Leverage is the amount of debt used to fund or purchase a company's assets. From these two definitions, leverage is defined as the use of borrowed capital to buy assets and fund the company's business.

Putra and Lestari [13] define dividend policy as a policy made by the management, whether or not the income earned might be distributed as dividends or might be retained. Meanwhile, in step with Priya and Mohanasundari [24] dividend coverage refers to a set of rules determined by the company in deciding how much profit is allocated to be distributed to shareholders. It may be concluded that dividend coverage is a selection to apply employer income for dividend bills to shareholders or to be retained as retained earnings.

A company which has a good liquidity is the company which has the ability to repay the debt in progress by the due date. Signal theory explains that this is a good signal for shareholders and enhances creditor confidence [27]. Maryam et al. [19] also explained high liquidity of a company will be used as an indicator for investors to conclude that the firm has a good financial condition because its short-term obligations can be paid. This good signal attracts investors to make investment and raises the stock price, which affects in increasing the value of the firm.

H1: Liquidity has a positive and significant effect on Firm Value

The value of profits earned by the company shows that the firm's wealth management performance has been effective and efficient in maximizing the capital from shareholders [28]. In signal theory, it is a positive signal to fund the company. The management performance is considered good in order to generate profits and the higher the profit is, the bigger dividends is distributed to the shareholders. The opportunity to get a good return will increase investors' interest in buying company shares which affect the value of the firm.
H2: Profitability has a positive and significant effect on Firm Value

Indrayani [27] states that if a company is highly leveraged, there is concern that the debt will increase its financing and the bad thing is the company will not be able to repay its debt with its assets. Based on signal theory, high leverage gives investors a negative signal. On the other hand, high leverage based on agency theory creates information asymmetry and conflicts of interest between management and shareholders. The higher the leverage, the better for the company. [27] Investors, on the other hand, view high leverage as an investment risk that reduces investor interest in investment and impacts the decline in corporate value.

H3: Leverage has a negative and significant effect on Firm Value

The liquidity component is cash. Cash can be given as the dividend to the shareholders. Companies need to be able to prioritize the payment of short-term debt with assets such as cash [32]. However, Fajaria and Isnalita [29] explain that the more money comes out, the less liquid the company becomes. According to signaling theory, a decline in a company's liquidity level may give investors a negative signal as it indicates that the firm is not able to fulfil their short-term debt and it will affect in decreasing the firm value.

H4: Dividend Policy is able to weaken the effect of Liquidity on Firm Value

Distributing the profits earned as dividends can reduce the profitability of the company the following year as less of the remaining profits are used to generate profits in the company's business. The statement was made by Fajaria and Isnalita [29] who found that profitable companies tend to pay high dividends, but companies that can pay high dividends find it difficult to maintain dividends for the next period [29].

H5: Dividend Policy is able to strengthen the effect of Profitability on Firm Value

Highly leveraged companies will have a hard time to convince the investors to give some fund in their company in the form of investment. Dividend can be a tool for showing signal to judge whether the company is good or bad and to become a source of income for the investor [30]. According to the previous theory that has been described, bird-in-hand theory, investors prefer to invest in companies that offer high dividends. Therefore, it is expected that if a company which leverage is high is able to provide high dividends. It can reduce investors' doubts and the negative effect of leverage on firm value will decrease.

H6: Dividend Policy is able to weaken the effect of Leverage on Firm Value

The research model of this study as presented in Figure 1 as follow:

![Research Model Diagram]

Figure 1. The Research Model
3. RESULTS AND DISCUSSION

The manufacturing companies which are listed on the Indonesia Stock Exchange between 2017 and 2019 have been selected as the population for this study. The sampling method is targeted sampling based on a given standard. a) The companies from manufacturing sector listed on the Indonesia Stock Exchange consecutively from 2017 to 2019. b) The company use rupiah as their financial report currency. c) Manufacturing companies whose accounting period ends on December 31st. d) The manufacturing company which has been making profits continuously from 2017 to 2019. e) The manufacturing company which consistently paid dividends from 2017 and 2019. There were 43 companies that met the criteria, with a total of 162 data, and as a result of running outlier tests using SPSS, 42 companies had a total of 126 data samples. The sample is then processed by EViews 12.

The secondary data is the type of data used in this study which is obtained from the financial statements and annual reports of the samples from the company's official website and with the help of website www.idx.co.id. The data is collected and processed using Microsoft Excel 2018 and further tested using EViews version 12. Moderated Regression Analysis is the research method used in this study. Test the analysis that applied consists of research model test, descriptive statistical analysis, outlier test using SPSS, classical assumption test with multicollinearity test and test heteroscedasticity using E-views version 12, multiple determination coefficient test, test simultaneous (F test), and partial test (t-test). Research model testing in this study is done using the Chow (Likelihood) test to compare the CEM and FEM, then Hausman test to compare between FEM and REM, and finally the Lagrange test Multiplier to compare between CEM and REM.

Following is the operationalization of each research variable as presented in Table 1 as follow:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Proxy</th>
<th>Scale</th>
<th>Adopted from</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm Value</td>
<td>PBV = Market Price per Share / Book Value per Share</td>
<td>Ratio</td>
<td>Husna and Satria (2019)</td>
</tr>
<tr>
<td>Liquidity</td>
<td>Cash Ratio = Cash + Cash Equivalents / Current Liabilities</td>
<td>Ratio</td>
<td>Tahu and Susilo (2020)</td>
</tr>
<tr>
<td>Profitability</td>
<td>ROA = Net Income / Average Total Asset</td>
<td>Ratio</td>
<td>Kieso, et.al (2020)</td>
</tr>
<tr>
<td>Leverage</td>
<td>DER = Total Liabilities / Total Equity</td>
<td>Ratio</td>
<td>Kieso, et.al (2020)</td>
</tr>
</tbody>
</table>

The multiple linear regression equation for this study is as follow:

\[ Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 Z + \beta_5 X_1 Z + \beta_6 X_2 Z + \beta_7 X_3 Z + \varepsilon \]

Note: \( Y = \text{Firm Value}; \ \alpha = \text{Constant}; \ \beta_1 - \beta_6 = \text{Regression Coefficient}; \ X_1 = \text{Liquidity}; \ X_2 = \text{Profitability}; \ X_3 = \text{Leverage}; \ Z = \text{Dividend Policy}; \ \varepsilon = \text{Error Term} \)

The mean of firm value is 4.505439, the standard deviation is 10.50372, and the maximum value is 82,44443. The mean of liquidity which uses the cash ratio (CR) as a proxy is 0.927000,
a standard deviation of 1.311102, and a maximum value of 8.798649. ROA which is the profitability, shows 0.011908 as the mean value, a standard deviation of 0.095808, and a maximum value of 0.526704 displayed. The leverage variable, expressed in DER, has a mean value of 2.731289, also a standard deviation of 2.190103, and a maximum of 11.03889. The moderating variable, Dividend Policy, has an average of 0.492354, also a standard deviation of 0.327417, and shows maximum value of 2.248649. The moderating variable, Dividend Policy, has an average of 0.492354, also a standard deviation of 0.327417, and shows maximum value of 2.248649. The Chow test shows that the probability cross-section chi-square is known to be 0.0000. A value of 0.0000 indicates whether H0 is rejected so that the selected regression model is between the fixed effect (FEM) models. The Hausmann test shows the probability value. The random cross-sectional area is 0.0000. It means that H0 will be rejected and Fixed Effects Model is chosen.

The result from multicollinearity test shows there is no correlation between variables which has value greater than 0.85 or 85%. In this way, this study has passed the multicollinearity test and can be said that the data is usable. Probability value. The chi-square of obs* R2 is 0.9090 indicates that the data in this study passed the heteroscedasticity test. Prob (F-statistics) shows a result of 0.0000, it indicates that Prob (F-statistics) not more than 0.05. H0 is then rejected and the model can be examined. Due to Liquidity, Profitability, Leverage, Dividend Policy, Liquidity with Dividend Policy moderation, Profitability with Dividend Policy moderation, Leverage with Dividend Policy moderation which together have the impact on the dependent variable.

The adjusted coefficient of determination shows a value of 0.931311. Therefore, the independent variables: liquidity, profitability, leverage, dividend policy, liquidity with dividend policy moderation, profitability with dividend policy moderation, leverage with dividend policy moderation are able to explain the dependent variables.

**Table 2. The Results of Hypotheses Testing**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Sig. Value</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquidity</td>
<td>-1.251688</td>
<td>0.1773</td>
<td>H1 is rejected</td>
</tr>
<tr>
<td>Profitability</td>
<td>19.26497</td>
<td>0.0248</td>
<td>H2 is accepted</td>
</tr>
<tr>
<td>Leverage</td>
<td>-0.417891</td>
<td>0.1957</td>
<td>H3 is rejected</td>
</tr>
<tr>
<td>Liquidity with Dividend Policy moderation</td>
<td>2.387862</td>
<td>0.1397</td>
<td>H4 is rejected</td>
</tr>
<tr>
<td>Profitability with Dividend Policy moderation</td>
<td>-44.91858</td>
<td>0.0017</td>
<td>H5 is rejected</td>
</tr>
<tr>
<td>Leverage with Dividend Policy moderation</td>
<td>1.077520</td>
<td>0.0982</td>
<td>H6 is rejected</td>
</tr>
</tbody>
</table>

The multiple linear regression equation used is as follows:

\[
Y = 6.818350 - 1.251688 X_1 + 19.26497 X_2 - 0.417891 X_3 - 4.719179 Z + 2.387862 X_1 Z - 44.91858 X_2 Z + 1.077520 X_3 Z + \epsilon
\]

Note: \( Y = Firm \, Value; \) \( \alpha = \) Constant; \( \beta1- \beta6 = \) Regression Coefficient; \( X_1 = Liquidity; \) \( X_2 = Profitability; \) \( X_3 = Leverage; \) \( Z = Dividend \, Policy; \) \( \epsilon = Error \, Term \)

Based on the statistical t-test, the probability value of liquidity is 0.1776 and the coefficient value shows a negative number of -1.26098. H1 is rejected because the study can conclude that the liquidity impact on firm value is negative and insignificant. The profitability coefficient value for this study is 19.16875 and the probability value is 0.0267. Those values mean that H2 is acceptable because profitability has a significant positive impact on the value of the firm.
The value of the leverage factor is negative and the value of the leverage probability is 0.2037. From this we can see that $H_3$ is unacceptable because there is a negative impact of leverage on firm value but not significantly. Liquidity with dividend policy as moderation shows a positive effect on firm value through a positive coefficient value. However, the probability of liquidity with dividend policy moderation of 0.1400 means that dividend policy is unable to moderate the relationship between liquidity and firm value. Therefore, $H_4$ is rejected. Profitability with dividend policy moderation shows different result from the hypothesis, the result is negative. The probability value of profitability with dividend policy moderation is stated at 0.0019. In other words, $H_5$ is rejected because dividend policy has the ability to weaken the effect of profitability on firm value. The probability of leverage with dividend policy moderation shows a positive influence on firm value through a positive coefficient value. However, the probability of leverage with dividend policy moderation of 0.1025, it means that dividend policy has no ability to moderate the effect of leverage on firm value. Therefore, we can conclude that $H_6$ is rejected.

The study found that liquidity cannot significantly affect firm value which is in contrast to the previously developed hypothesis that liquidity has a significant and also positive impact on firm value. In the long run, investors are looking at the ability of the company in return for its investment using other indicators compared to the size of the company's liquidity. In addition, investors see this as a negative signal, as too much idle money can lead to poor company performance and inability to manage cash efficiently and productively to increase shareholder value. The results from Tahu and Susilo [10], Aldi et al. [32], Wirianata and Wijoyo [25], and Indrayani [27] is consistent with the study who discovers that liquidity has not a significant effect on firm value. Profitability is positively and significantly can impact the firm value, so the second hypothesis is accepted and confirmed. Investors prefer to look at the long-term capabilities of the company such as the ability of the management to use and manage its assets to earn profits. The profitability variables in this study are estimated by the rate of ROI, so the higher the ROA, the more effective and also more efficient the firm's performance is in using its assets to earn high revenue. For investors, this is a positive signal, increasing demand for equities in the market and increasing corporate value. This result is consistent with the work of Sukmawardini and Ardiansari [30], Tahu and Susilo [10], Suhardi [11], Fajaria and Isnalita [29], Oktaviani and Mulia [31], Aldi et al. [32], Sudiani and Darmayanti [8], Maryam, et al. [19], Indrayani et. al [27], Kanta et. al [12].

The third hypothesis in this study cannot be common due to the fact the findings of the prevailing outcomes do now no longer discover a massive impact among leverage at the established variable of organization value. Investors are extra interested by the capacity to control debt through the employer’s control in order that it is able to offer excessive earnings for the employer. High leverage does growth funding danger due to the fact the much more likely the employer is not capable of repay its debts. However, this is not a massive hassle for traders if the employer can control its debt well, it's going to now no longer motive doubts for traders while identifying to make investments within the employer due to the fact the employer is taken into consideration to have the capacity to repay its debts. This outcome is according with the outcome of studies carried out through Tahu and Susilo [10], Rasyid [33], Sukmawardini and Ardiansari [30], Indrayani [27], Kanta, et al. [12]. The fourth hypothesis turned out to be unacceptable. The study found that the moderating variable, dividend policy, has no ability moderate (weakens) the impact of liquidity on firm value. If there is uncertainty in a company's financial flexibility, the company may not pay large dividends to maintain and forecast liquidity. In addition, the amount of dividend does not affect the liquidity of the firm, as the company prioritizes short-term debt repayment and interest on the debt, and the rest is
distributed to shareholders as dividends. This is because it was previously considered management. This result is consistent with the Tahu and Susilo study [10].

The fifth hypothesis is unacceptable. This study has found if the moderating variable, dividend policy, could weaken the effect between profitability and firm value. If the company is profitable, they usually pay high dividends. However, this can also be a concern for investors. If the company decides to pay in one lump sum, it will reduce the amount of cash that the company can spend on profitable activities, which will reduce the profitability of the company. This result is consistent with the Tahu and Susilo study [10].

The sixth hypothesis proved to be unacceptable. The result of this study found that dividend policy is not able to weaken the effect of leverage on firm value. High levels of leverage can increase investment risk, so no matter how good your company's dividend policy is, it cannot affect investors. Not all investors dare to take this risk, but with proper management, high leverage can generate good returns. In addition, companies with high levels of debt prioritize long-term debt payments and debt interest payments over large dividend payments. Based on bird-in-hand theory, this can discourage investors from investing in a company. The result is consistent with the research of Aldi et al. [32].

4. CONCLUSIONS AND SUGGESTIONS

The conclusions from the research conducted based on the the data chosen which has been processing and testing in this study. First, liquidity’s effect on firm value is negative and also insignificant. Second, profitability is found has significant positive impact on firm value. Third, leverage’s effect on firm value is negative and insignificant. Fourth, dividend policy cannot able to weaken the impact of liquidity on firm value. Then, dividend policy is able to weaken the impact of profitability on firm value and dividend policy is not able to weaken the impact of leverage on firm value.

Profitability is found to have a significant impact on firm value, so companies need to pay attention to profitability when making decisions and policies to maximize firm value. Therefore, increasing or decreasing this variable will affect the firm value. In addition, companies need to consider other factors that may affect corporate value, such as dividend policy. This is done to help companies compete in the market, win the trust of shareholders, and facilitate external funding.

The investors who will invest are expected to pay attention to the firm’s profitability because this research has shown that profitability has a significant impact on a firm's value. Author hopes that investors are not wrong in invest their capital and in order to get a profit from the investment conducted.

This study has the advantage of using a moderating variable of dividend policy. However, this research also has some limitations that are expected to be improved in the future research. Some suggestions can be given for future researchers. It is hoped that future research can use a longer time period because this study only uses the 2017-2019 period. It is hoped that future research can expand research subjects not only to manufacturing companies but also to mining, property, and other sectors on the IDX. Then, it is hoped that future research can add more independent variables, such as growth, investment opportunity, and firm size.
REFERENCES


