ANALYSIS OF FUNDING AND INVESTMENT DECISIONS TO THE VALUE OF COMPANY WITH PROFITABILITY AS MODERATION IN PHARMACY SUB-SECTOR COMPANIES BEFORE AND DURING THE COVID-19 PANDEMIC

ANALISIS KEPUTUSAN PENDANAAN DAN INVESTASI TERHADAP NILAI PERUSAHAAN DENGAN PROFITABILITAS SEBAGAI MODERASI PADA PERUSAHAAN SUB SEKTOR FARMASI SEBELUM DAN SELAMA PANDEMI COVID-19

Rita Mulyani
Institut Agama Islam Negeri Lhokseumawe
Email: ritamulyani@iainlhokseumawe.ac.id

Retno Fuji Oktaviani
Universitas Budi Luhur
Email: retno.fujioktaviani@budiluhur.ac.id

Abstract
This study aims to analyze the effect of decisions, funding and investment decisions on the company and analyze the profitability of being able to moderate the effect of funding and investment decisions on the value of the pharmaceutical company sub-sector companies listed on the Indonesia Stock Exchange for the 2017-2021 period, namely before and during the Covid-19 pandemic. Methods The analysis used is multiple regression with R studio tools for statistical data processing. The results showed that the funding decision proxied by DER had no effect on firm value. Investment decisions proxied by PER have an influence on firm value. The profitability variable in this study is able to moderate the effect of investment decisions and decisions on firm value.

Keywords: funding decision; investment decision; profitability; the value of company; moderation; R studio

Abstrak

Kata kunci: keputusan pendanaan; keputusan investasi; profitabilitas; nilai perusahaan; moderasi; R studio
A. INTRODUCTION

The Covid-19 pandemic situation that has hit the world brings various impacts on daily life and affects the growth and development of the country's economy. The pharmaceutical sector is one of the business industries that can grow in the COVID-19 situation. The health crisis caused by COVID-19 has an impact on various aspects of health, humanity, society, and even the economy. Several pharmaceutical companies have proven to be able to record increased profits in the first half of 2020. This is due to the increasing demand for medicines, health vitamins, and medical devices during the COVID-19 pandemic.

Referring to this phenomenon, a company needs a strong foundation to be able to survive all conditions that occur, namely through the Company's Goals. One of the company's long-term goals is to provide prosperity to shareholders. Investors in investing, first collect information about the company to be invested. Investors will use this information to make decisions on their investments and analyze the risks that may occur.

Firm value is an important aspect for investors who plan to invest their capital. Company value is a form of achievement that has been achieved by the company as a form of trust from the community which describes the company's condition, if the company's condition is in good condition then the company's value is also in good condition (Sanggita and Syaiful, 2022). The rise and fall of company value can be seen, one of which is using Price Book Value (PBV). A good PBV value can prove that the better the company's performance in generating value for investors. Meanwhile, the value of the company that is experiencing a decline can provide an information signal about the poor performance of the company, especially to investors. Re-optimizing the value of the company can be done by taking into account several factors, namely decisions, investment decisions, and profitability.

Funding decisions are factors associated with optimizing firm value. All forms of production operational activities are not only financed by company profits, but also by funding from outside parties. The funding decision relates to the source of funds to be used in financing the company's activities by conducting several assessments so that the funds can be categorized as feasible and effective. The condition of the funding decision can be seen by using the Debt Equity Ratio (DER). This ratio is used to
compare the company's total debt with the company's total capital (Rusmanto, et.al., 2021).

Investment decisions are a function of the company's financial management related to the allocation of funds, both internal and external funds. When the amount of company debt increases, it is likely that the company is unable to pay its obligations. If the company creates a policy in the form of the right investment decision, then the company's assets can work optimally (Wardani, 2020). Price Earning Ratio (PER) is one of the indicators used to measure the investment decisions of the company. PER reflects the basis of the assessment in the capital market of the company in generating future profits.

Profitability can be interpreted as the company's ability to earn profits within a certain period (Alvira and Triyonowati, 2021). Profitability is used by investors to consider whether the company has a good company value or not. In essence, every company in carrying out its production activities must be in a profitable state.

B. THEORETICAL FRAMEWORK

The value of the company is a series of prices to be paid by shareholders, which price is a reflection of the performance prospects of the company and later the price that has been paid will be processed again by the company's management to improve the welfare of investors (Harmono, 2020). The PBV value can be obtained through a comparison between the stock price and book value. If the higher the PBV value, the higher the welfare and prosperity of investors, this is in accordance with the company's goal of maximizing the value of the company.

$$\text{Price Book Value} = \frac{\text{Share Price Per Share}}{\text{Book Value}}$$


The funding decision is a form of responsibility attitude of a company's financial management to obtain sources of funds, which will be used in investment activities or production activities. The company's internal parties, especially financial management, must direct all their abilities to find additional sources of funds efficiently and then reuse them (Jannah, et.al, 2019). The DER indicator is one of the financial ratios to
determine how much the company's ability to finance its business through debt options. DER measurement is done by making a comparison between debt and the company's total equity. If the DER measurement results are high, it means that most of the funds used by the company come from debt.

\[
\text{Debt to Equity Ratio} = \frac{\text{Total Amount of Debt}}{\text{Total Capital}}
\]

Source: Kasmir, 2019.

Investment decisions are decisions that not only discuss the problem of the company's ability to obtain assets, but also discuss all decisions that have been designed by the company. The decision consists of a commitment to manage large amounts of funds at this time, and then create additional funds for the future (Hendra et. al., 2020). The PER indicator is widely used to assist investors in their investment decision-making process.

\[
\text{Price Earning Ratio} = \frac{\text{Price Per Share}}{\text{Earnings Per Share}}
\]


Profitability is one of the financial ratios used to assess the company's ability to generate profits (Kasmir, 2019). Profitability is used to measure the level of the company's ability to generate profits or net income from its production activities. With the achievement of maximum profit, the company will use it to improve the quality of its production (Dewi and Farida, 2021). ROA can provide explanations to stakeholders, such as investors, and management to analyze the extent to which company management uses total assets as well as possible.

\[
\text{Return on Asset} = \frac{\text{Net Profit}}{\text{Total Assets}}
\]

Source: Kasmir, 2019.
The high value of DER will be a positive signal to investors because the high debt of the company is a reflection of the company's ability to pay off its obligations in the future. Therefore, investors will also be interested in investing their capital in the company and this will affect the high share price and company value. This is in accordance with the research conducted by Triana and Miradji (2021) through the DER measurement indicator which states that funding decisions have a positive effect on firm value.

\[ H_1 = \text{Funding decisions have an effect on firm value} \]

A high PER value is synonymous with excellent company performance prospects and attracts investors to the company. The high demand for shares makes the stock price also high so investors appreciate the value of the company more. This opinion is also the same as the research conducted by Oktavia and Kalsum (2021) which states that investment decisions using PER have a positive effect on firm value.

\[ H_2 = \text{Investment decisions have an effect on firm value} \]

The welfare of shareholders and the company is represented by the selling price of the company's shares. The stock price formed from the offer and demand of buyers or sellers at the time of making a transaction is called market value. Market value, which is an aspect of forming company value, is influenced by investment opportunities. The emergence of investment opportunities will provide a positive signal about the extent of the company's development and growth in the future period. Profit or profit itself is generated through the sale of production results, and any investment activities. The high
profitability of the company gives interest to investors in entrusting their capital to the company concerned.

H₃ = Profitability can moderate the effect of funding decisions on firm value.

The growth of the company can provide information signals to investors, so that the value of the company increases through the increase in the company's share price. The higher the profitability value in the financial statements, it means that the company's performance is in good condition. This provides an overview of the growing wealth of investors and the prospects for the company's performance for the future are more promising

H₄ = Profitability can moderate the effect of investment decisions on firm value.

C. RESEARCH METHODS

This study uses multiple linear regression analysis with moderating variables. Statistical analysis tool using Rstudio Software with queries. The tests carried out include the Classical Assumption test which consists of a normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test. Then a hypothesis test was conducted which consisted of a determination test, a correlation test, a model feasibility test, and a t-test. Based on the results of hypothesis testing, it can be obtained multiple linear regression equations.

\[ \text{Company Value}_1 = a + b KP + b Ki + b KP_{Pr} + b Ki_{Pr} \]
\[ \text{Company Value}_2 = a + b KP + b Ki + b KP_{Pr} + b Ki_{Pr} \]

Information :
Company Value ₁ = Model before the covid pandemic condition
Company Value ₂ = Model during the covid pandemic condition
a = Constant
b = variable coefficient
KP = Funding Decision
Ki = Investment Decision
KP_{Pr} = Profitability moderates the effect of Funding Decisions
Ki_{Pr} = Profitability moderates the effect of Investment Decision
D. RESEARCH RESULTS AND DISCUSSION

1. Descriptive

Results Descriptive statistics can provide an overview of each variable regarding the average value (Mean), median value, minimum value, and maximum value of the variables studied.

<table>
<thead>
<tr>
<th>PBV</th>
<th>DER</th>
<th>PER</th>
<th>ROA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min</td>
<td>0.107</td>
<td>Min</td>
<td>0.091</td>
</tr>
<tr>
<td>1st Qu.</td>
<td>1.212</td>
<td>1st Qu.</td>
<td>0.376</td>
</tr>
<tr>
<td>Median</td>
<td>2.001</td>
<td>Median</td>
<td>0.498</td>
</tr>
<tr>
<td>Mean</td>
<td>2.587</td>
<td>Mean</td>
<td>0.827</td>
</tr>
<tr>
<td>3rd Qu.</td>
<td>3.713</td>
<td>3rd Qu.</td>
<td>1.370</td>
</tr>
<tr>
<td>Max</td>
<td>9.890</td>
<td>Max</td>
<td>3.825</td>
</tr>
</tbody>
</table>

Source: Output Rstudio

2. Normality test

Based on the Shapiro-Wilk test, it produces a p-value of 3.923 which is greater than the significant value of 0.05 so it can be said that the data is normally distributed.

3. Autocorrelation test

The Durbin Watson test resulted in a p-value greater than a significant value of 0.6971 > 0.05, so it can be said that there is no autocorrelation in the research variables.
4. Homogeneity test

Tabel 4. Breusch-Pagan Test

<table>
<thead>
<tr>
<th>Breusch-Pagan test</th>
</tr>
</thead>
<tbody>
<tr>
<td>data: reg1</td>
</tr>
<tr>
<td>BP = 2.1558, df = 4, p-value = 0.7071</td>
</tr>
</tbody>
</table>

Source: Rstudio output

The Breusch-Pagan test results in a p-value greater than a significant value of 0.7071 > 0.05, so it can be said that the research data is homogeneous and there is no heteroscedasticity.

5. Multicollinearity test

Tabel 5. VIF value

<table>
<thead>
<tr>
<th>DER</th>
<th>PER</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.3949</td>
<td>3.281248</td>
</tr>
</tbody>
</table>

Source: Rstudio output

Multicollinearity testing using VIF value resulted in each independent variable, namely DER and PER having a VIF value < 10, so it can be said that the research data does not have multicollinearity problems.

6. Goodness of fit test

Tabel 6. F test

| Residual standard error: 1.723 on 40 degrees of freedom |
| Multiple R-squared: 0.378, Adjusted R-squared: 0.3158 |
| F-statistics: 6.078 on 4 and 40 DF, p-value: 0.0006427 |

Source: Rstudio output

The goodness of fit test using the F test results in a p-value of 0.0006427 which is smaller than the significant value of the study, namely 0.05, and the F-stat value of 6.078 > F table 2.612, so it can be said that the research model is feasible to use.
7. Hypothesis test

| Coefficient: | Estimate | Std. Error | t value | Pr(>|t|) |
|-------------|----------|------------|---------|---------|
| (Intercept) | 2.8917   | 0.40692    | 7.106   | 1.33E-08*** |
| DER         | 0.6789   | 0.51533    | 1.317   | 0.195206 |
| PER         | -0.038   | 0.01498    | -2.559  | 0.014401 *  |
| DERmoderasi | -18.15   | 4.73404    | -3.833  | 4.38E-04 ***|
| PERmoderasi | 0.4283   | 0.09968    | 4.297   | 0.000108 ***|

Signif. Codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 '' 1

Source: Rstudio output

The results of hypothesis testing can be explained:

The effect of funding decisions on firm value produces a p-value of 0.195206 > 0.05 so H₁ is rejected, which means that funding decisions do not have a significant effect on firm value. This shows that high or low debt in a company does not affect the value of the company. Investors do not see the size of the use of debt as a variable in determining investment. Investors only see how to use the debt effectively and efficiently in generating added value for the company. Thus the value of the company is not affected even though the funding decision itself changes. The results of this study support several previous studies, namely Emi and Ellen (2019), Sherly and Mia (2020), Fitri and Eliada (2020), and Elga Cindy and Mujiyati (2022) which stated that funding decisions (DER) did not affect firm value.

The effect of investment decisions on firm value produces a p-value of 0.014401 <0.05 so H₂ is accepted, which means that investment decisions have a significant influence on firm value. As is well known, investment decisions are very important decisions. In this case, The company's financial manager must be able to allocate funds into forms of investment that can bring profits in the future. Managers must also maintain the development of investments to achieve company goals through shareholder prosperity. The right investment decision will be able to produce an optimal performance to provide a positive signal to investors that will increase stock prices and company value. This is in line with a signal theory where high investment decisions made by companies will generate positive signals for investors. The results of this study support several previous studies, namely Bagus
Profitability can moderate the effect of funding decisions on firm value resulting in a p-value of 0.000438 <0.05 so that $H_3$ is accepted, that is, profitability can moderate the effect of funding decisions on firm value. With the increase in debt, the company obtains funds to develop business operations to increase company profits. If the use of debt provides greater benefits than the sacrifices incurred by the company, then the use of debt can increase the company's net profit. However, if the sacrifices incurred are greater than the benefits provided from the use of debt and the profits obtained, it can affect investor interest can reduce the value of the company. The results of this study are in line with Bagus's (2018) research which states that profitability can moderate the relationship between funding decisions and firm value.

Profitability can moderate the effect of investment decisions on firm value resulting in a p-value of 0.000108 <0.05 so $H_4$ is accepted, that is, profitability can moderate the effect of investment decisions on firm value. In this case, investors view the increase in company profits as a positive signal. Therefore, of course, investors are interested in investing in companies that have good prospects, so that the company's stock price will increase. The increase in stock prices also has an impact on increasing the value of the company. The high profitability of the company gives interest to investors in entrusting their capital to the company concerned. The results of this study are in line with Bagus's (2018)'s research which states that profitability can moderate the relationship between investment decisions and firm value.

8. Multiple regression equation

The multiple regression equation obtained based on the results of the coefficient calculation in conditions before the covid-19 pandemic and during the covid-19 pandemic can be described as follows:
Tabel 8. Coefficient

| Coefficient:          | Estimate_1 | Pr(>|t|) | Estimate_2 |
|----------------------|------------|---------|------------|
| (Intercept)          | 2.4993     | 0.00217 | **2.01271  |
| DER                  | 3.06926    | 0.04791 | *1.39037   |
| PER                  | -0.09129   | 0.02529 | *-0.06101  |
| DERmoderasi          | -36.51025  | 0.00910 | **-19.3881 |
| PERmoderasi          | 0.78856    | 0.00662 | **0.82536  |
| Signif. Codes : 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 '' 1 |

Source: Rstudio output

\[ NP_1 = 2.4993 + 3.06926 \, KP - 0.09129 \, KI - 36.5102 \, KP_{Pr} + 0.78856 \, KI_{Pr} \]

\[ NP_2 = 2.01271 + 1.39037 \, KP - 0.06101 \, KI - 19.3881 \, KP_{Pr} + 0.82536 \, KI_{Pr} \]

E. CONCLUSION

Based on the results of the discussion and the results of data processing, it can be concluded that funding decisions proxied by DER do not affect firm value. Investment decisions proxied by PER influence firm value. The profitability variable in this study was able to moderate the effect of funding decisions and investment decisions on company value in the pharmaceutical sub-sectors listed on the Indonesia Stock Exchange for the 2017 period before the covid 19 pandemic until the 2021 period during the covid 19 pandemic.

REFERENCES


