THE INFLUENCE OF PROFITABILITY, CAPITAL STRUCTURE, INVESTMENT DECISION, AND FIRM SIZE ON FIRM VALUE
(A Study in the Pharmaceutical Sector Listed on the Indonesian Stock Exchange)

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Abstract
This study examines the influence of profitability, capital structure, investment decisions, and firm size on firm value in pharmaceutical sub-sector companies on the Indonesia Stock Exchange. This study uses secondary data from the financial statements of each pharmaceutical sub-sector company. The sample in this study consists of 9 pharmaceutical sub-sector companies listed on the Indonesia Stock Exchange during 2018-2021. The data analysis method used is a multiple linear regression test with the help of Eviews 12. The results partially show that return on assets, return on equity, and capital structure has a positive and significant effect on firm value. Meanwhile, investment decisions and firm size partially do not significantly affect firm value in pharmaceutical sub-sector companies listed on the Indonesia Stock Exchange for the 2018-2021 period.

Keywords: Return On Assets, Return On Equity, Capital Structure, Investment Decision, Firm Size, and Firm Value.

INTRODUCTION
Performance appraisal/performance of a company is measured because it can be used as a basis for decision-making by internal and external parties, which appears through the company's financial performance. Performance is a description of the achievements achieved by a company in its operational activities in terms of financial aspects, marketing aspects, aspects of raising funds and channeling funds, aspects of technology, as well as aspects of its human resources. According to Brigham and Houston (2018: 71), the purpose of a company that has gone public is to increase prosperity for the owners or shareholders by increasing the achievement or firm value.

The company's primary purpose is to seek profit to maximize corporate value or the prosperity of shareholders and maintain its survival (going concerned). To gain profit, the company owner or shareholder authorizes the management to run the company. Jufrizen and Fatin (2020) mention that investors or potential investors require an accurate analysis before investing in the capital market. In investing, investors will consider as well as possible which company the capital will be invested in to obtain maximum profits and avoid losses that will occur in the future.

The firm value is something to be concerned about by the company management. The management of a company will always try to increase the firm value because by maximizing the value of the company, the company can achieve its goals so that the company will be able to continue to compete and be able to continue to survive in a global market competition which time the competition feels increasingly tight. Sari and Subardjo (2018) mention that the firm value is reflected in the stock market price of go-public companies. The stock market price is the price that potential investors are willing to pay if they want to own shares in a company. It reveals that a high stock price will be followed by a high firm value.

In the working or financial conditions of a company, investors can also see the value contained in the company. Firm value is an investor's perception of a company's level of success, which is often associated with stock prices and profitability. Salempang in Jufrizen and Fatin (2020) explains that high stock prices make the company value also high, and high firm value will make the market believe not only in the company's current performance but also in the company's prospects in the future.

Pharmaceutical companies contribute to economic growth in Indonesia, with the times and technology that continue to develop, medical devices, medicines, hospitals, and others. The existence of this pharmaceutical company can provide benefits for those in need, such as hospitals, clinics, and so on. The pharmaceutical industry in Indonesia has the potential to develop natural resources related to its production process. It is not only chemical...
medicinal raw materials that can be developed but also natural or herbal-based ingredients in the production process. Therefore, the pharmaceutical industry included in the strategic industry can still run when the total PSBB rules are enforced (Liputan6.com, 2020).

The high growth rate of pharmaceutical sector companies will influence the higher growth rate of shares. Firm value is a normative goal of financial management. The firm value is the investor's perception of the company's level of success, which is closely related to its stock price. Henry (2018) supports that firm value is a particular condition achieved by a company as an illustration of public trust in a company after going through a process of activity for several years from the beginning until now.

One of the factors affecting firm value is profitability because if a company continues to obtain high profitability, the value of its shares will continue to increase. After all, investors are increasingly interested in investing in the company. According to Sutrisno (2017: 16), profitability is a company's ability to generate profits with all the capital working on it. Profitability is the primary measure of company success as the result of many policies and decisions. Previous research conducted by Hidayati and Priyadi (2022) concludes that profitability positively and significantly influences firm value. Whereas, Nasution (2021) has found that profitability did not significantly affect firm value.

Another factor influencing firm value is capital structure because capital structure is a comparison between foreign capital or long-term debt with own capital, own capital structure can optimize the balance between risk and return, which will maximize stock prices in stable conditions or optimal. According to Fahmi (2018), the capital structure is an illustration of the form of a company's financial proportions, namely between owned capital that comes from long-term debt and own capital as a source of financing for a company. Previous research conducted by Julaeha et al (2021) concludes that capital structure positively and significantly influences firm value. Whereas, Fitriyah and Djawoto (2021) has found that capital structure did not significantly affect firm value.

The investment decision is also one of the factors that can affect firm value because the better the investment decisions made by the management of a company will increase firm value in the eyes of investors. According to Sutrisno (2017: 5), an investment decision is a matter of how financial managers should allocate funds to an investment that can generate profits in the future. Previous research conducted by Haq and Rahayu (2019) concludes that investment decision positively and significantly influences firm value. Whereas, Nasution (2021) has found that investment decision did not significantly affect firm value.

Another factor affecting firm value is firm size because of the larger firm size and a higher firm value when selling the company in the future. According to Hartono (2017: 14), firm size can be measured by the total assets or the size of the company's assets. Previous research conducted by Fitriyah and Djawoto (2021) concludes that firm size positively and significantly influences firm value. Whereas, Wahyuni and Purwaningsih (2021) has found that firm size did not affect firm value.

Several previous studies' results often differ and tend to be inconsistent, and produce research gaps in research results. Hidayati and Priyadi (2022) and Halik (2018) find that ROA positively and significantly affects firm value. However, previous research by Artati (2020) and Tanjung and Halawa (2022) reveals that ROA does not affect firm value. Then from the ROE variable, different research results were obtained, as in the research that was conducted by Sondakh, et al (2019) and Ali et al (2021) find that ROE positively and significantly affects firm value, while different results were obtained by Tanjung and Halawa (2022) reveals that ROE does not affect firm value. Furthermore, from the capital structure variable, different results were obtained, such as research conducted by Oktiwiati and Nurhayati (2020) and Julaeha, et al (2021) find that capital structure positively and significantly affects firm value, while the results different results were obtained by Haq and Rahayu (2019) and Fitriyah and Djawoto (2021) reveals that capital structure does not affect firm value. Then the same thing happens to the investment decision variable, where Haq and Rahayu (2019) and Oktiwiati and Nurhayati (2020) find that investment decision positively and significantly affects firm value, while Amalyah and Herriyanti (2020) and Salama, et al (2019) which found that investment decisions did not affect firm value. As well as from the firm size variable the same thing also occurs, where in research conducted by Yuniastri, et al (2021) and Haq and Rahayu (2019) find that firm size positively and significantly affects firm value, while Wahyuni and Purwaningsih (2021) and Nasution (2021) reveals that firm size does not affect firm value.
RESEARCH METHOD

The data analysis method used in this study is a quantitative method using panel data regression analysis. According to Sugiyono (2018), panel data is a combination of time series data and cross-section data. The data analysis used to solve the problems in this study is panel data regression analysis with the help of Eviews 12. The research data used is in the form of secondary data, namely annual reports published by pharmaceutical sector companies listed on the Indonesia Stock Exchange for the 2018-2021 period, with 9 companies as the samples taken using the purposive sampling method.

The data analysis method is a method used to manage research results to obtain conclusions (Ghozali, 2018). The technique used in this study is multiple linear regression analysis to know how the independent variable influences the dependent variable using SPSS 26. Hypothesis testing uses statistical tests to determine whether to accept or reject the proposed hypothesis. The multiple linear regression equation in this study is as follows:

\[ Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \epsilon \]

Information:
\( Y \): Firm Value
\( \alpha \): Constant
\( \beta \): Koefisien Regresi
\( X_1 \): Return On Assets
\( X_2 \): Return On Equity
\( X_3 \): Capital Structure
\( X_4 \): Investment Decision
\( X_5 \): Firm Size
\( E \): Error Term

The variables used in this study are:

a. Return On Assets
Return On Assets (ROA) is a company's ability to generate net profit by using its total assets, where the indicators are as follows (Hery, 2018):

\[ ROA = \frac{Net\ Income}{Total\ Assets} \]

b. Return On Equity
Return On Equity (ROE) is a ratio that measures net profit after tax with own capital. This ratio shows the efficiency of using own capital, where the higher this ratio indicates, the better the position of the company owner. Return on equity can be measured by the following formula (Hery, 2018 :175):

\[ ROE = \frac{Net\ Income}{Total\ Equity} \]

c. Capital Structure
The capital structure is a balance of permanent short-term debt, long-term debt, preferred stock, and common stock. The indicators are as follows (Kasmir, 2017):

\[ DER = \frac{Total\ Debt}{Total\ Equity} \]

d. Investment Decisions
Investment decisions are actions to invest funds currently owned into current and fixed assets to obtain profits in the future. The indicators are as follows (Tandelilin, 2017):

\[ TAG = \frac{TA_t - TA_{t-1}}{TA_{t-1}} \]

e. Firm Size
Firm size is a tool that can be used as a reflection to see how big or small the company is using the total assets owned by the company. The indicators are as follows (Hartono, 2017):
f. Firm Value
Firm value is the prospective buyer's price willing to pay if the company is sold. For the company, it is a market value. Market value is a market perception that comes from investors. The indicators are as follows (Kasmir, 2017: 131):

\[ PBV = \frac{Stock \ Price}{Book \ Value \ Per \ Share} \]

The framework and hypotheses in the research are as follows:

**Return On Assets** (X₁)  
**H₁ (+)**

**Return On Equity** (X₂)  
**H₂ (+)**

**Capital structure** (X₃)  
**H₃ (+)**

**Investment decision** (X₄)  
**H₄ (+)**

**Firm size (X₅)**  
**H₅ (+)**

**Firm value** (Y)

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**Figure 1. Conceptual Framework**

Description of the conceptual framework that is supported by existing theory. Then the research hypotheses are as follows:

H₁: Return On Assets positively and significantly influences firm value in pharmaceutical sector listed on the Indonesia Stock Exchange.

H₂: Return On Equity positively and significantly influences firm value in pharmaceutical sector listed on the Indonesia Stock Exchange.

H₃: Capital structure positively and significantly influences firm value in pharmaceutical sector listed on the Indonesia Stock Exchange.

H₄: Investment decision positively and significantly influences firm value in pharmaceutical sector listed on the Indonesia Stock Exchange.

H₅: Firm size positively and significantly influences firm value in pharmaceutical sector listed on the Indonesia Stock Exchange.
RESULTS AND DISCUSSION

Determination of Panel Data Estimation Techniques

In the panel data there are three estimation models, namely Common Effect or Pooled Least Square, Fixed Effect and Random Effect which will be tested which is the best model to use in this study. The test is carried out by testing the Chow Test, and the Lagrange Multiplier Test. Chow test is done to test which model is selected between Common Effect and Fixed Effect. To see which model is the best of the two models can be seen from the Probability Cross-Section F value. The Lagrange Multiplier test is carried out with the aim of determining the best method in panel data regression, whether to use the Common Effect or the Random Effect.

<table>
<thead>
<tr>
<th>Table 2. Chow Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Effect Test</strong></td>
</tr>
<tr>
<td>Cross-section F</td>
</tr>
<tr>
<td>Cross-section Chi-Square</td>
</tr>
</tbody>
</table>

Table 2 above shows that the probability value obtained is 0.0000 or lower than the significant level used, namely 0.05 (0.0000 < 0.05). Therefore, the fixed effect is the best model. Because the fixed effect model is the best, the Hausman test must be carried out to compare the fixed effect model with the random effect model to find out which model to use in the study.

<table>
<thead>
<tr>
<th>Table 3. Hausman Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Test Summary</strong></td>
</tr>
<tr>
<td>Cross-section random</td>
</tr>
</tbody>
</table>

Based on table 3 above, the probability value obtained is 0.9812 or higher than the significant level used, namely 0.05 (0.9812 > 0.05). Therefore, it concludes that the random effect model is the best and is the model that will be used in this study.

Hypothesis Tests

Partial Tests

<table>
<thead>
<tr>
<th>Table 4. Partial Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Variable</strong></td>
</tr>
<tr>
<td>(Constant)</td>
</tr>
<tr>
<td>Return On Assets</td>
</tr>
<tr>
<td>Return On Equity</td>
</tr>
<tr>
<td>Capital Structure</td>
</tr>
<tr>
<td>Investment Decision</td>
</tr>
<tr>
<td>Firm Size</td>
</tr>
</tbody>
</table>

Based on the partial test results above, the results of the probability of return on assets are 0.0000 or lower than 0.05 (0.0000 < 0.05) and obtain a t-count value of 26,40368 or greater than the t-value table is 1.97568 (26,40368 > 1.97568) and a regression coefficient value of 0.748543. So, it summarizes that the return on assets has a positive and significant effect on firm value. Therefore, the hypothesis states that return on assets has a positive and significant effect on firm value in pharmaceutical sub-sector companies listed on the Indonesia Stock Exchange during 2018-2021 (H1 is accepted).

The results of the probability of return on equity are 0.0000 or lower than 0.05 (0.0000 < 0.05) and obtain a t-count value of 32,56898 or greater than the t-value table is 1.97568 (32,56898 > 1.97568) and a regression coefficient value of 0.955036. So, it summarizes that the return on equity has a positive and significant effect on firm value. Therefore, the hypothesis states that return on equity has a positive and significant effect on firm value in pharmaceutical sub-sector companies listed on the Indonesia Stock Exchange during 2018-2021 (H2 is accepted).
The results of capital structure are 0.0000 or lower than 0.05 (0.0000 <0.05) and obtain a t-count value of 2,197301 or greater than the t-value table is 1.97568 (2,197301> 1.97568) and a regression coefficient value of 0,681848. So, it summarizes that the capital structure has a positive and significant effect on firm value. Therefore, the hypothesis states that capital structure has a positive and significant effect on firm value in pharmaceutical sub-sector companies listed on the Indonesia Stock Exchange during 2018-2021 (H₃ is accepted).

The results of investment decision are 0.0000 or higher than 0.05 (0.0000 >0.05) and obtain a t-count value of 1,246393 or smaller than the t-value table is 1.97568 (1,246393 < 1.97568) and a regression coefficient value of 0,064184. So, it summarizes that the investment decision has no significant effect on firm value. Therefore, the hypothesis states that investment decision has a positive and significant effect on firm value in pharmaceutical sub-sector companies listed on the Indonesia Stock Exchange during 2018-2021 (H₄ is rejected).

The results of firm size are 0.0000 or higher than 0.05 (0.0000 >0.05) and obtain a t-count value of 1,921647 or smaller than the t-value table is 1.97568 (1,921647 < 1.97568) and a regression coefficient value of 0,086336. So, it summarizes that the firm size has no significant effect on firm value. Therefore, the hypothesis states that firm size has a positive and significant effect on firm value in pharmaceutical sub-sector companies listed on the Indonesia Stock Exchange during 2018-2021 (H₅ is rejected).

Determination Coefficient Test

<table>
<thead>
<tr>
<th>Table 5. Determination Coefficient Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Root MSE</td>
</tr>
<tr>
<td>Mean dependent var</td>
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</tbody>
</table>

Based on the test results for the coefficient of determination in the table above, the projected adjusted $R^2$ value as the value of the coefficient of determination is 0.887667. It shows that the firm value of pharmaceutical sub-sector companies listed on the Indonesia Stock Exchange during 2018-2021 is influenced by return on assets, return on equity, capital structure, investment decisions, and firm size of 88.77%. Meanwhile, the remaining 11.23% of firm value in pharmaceutical sub-sector companies listed on the Indonesia Stock Exchange from 2018 to 2021 is influenced by other variables beyond this study.

Multiple Linear Regression Analysis

Multiple linear regression analysis in this study aims to determine the effect of return on assets, return on equity, capital structure, investment decisions, and firm size on firm value. The multiple linear regression equation in this study is as follows:

$$Y = 294,9654 + 0.7485X_1 + 0.9550X_2 + 0.6818X_3 + 0.0642X_4 + 0.0863X_5$$

Based on the multiple linear regression equation above, the result is that the coefficient value of the return on assets obtained is 0.7485. It shows that if the return on assets increases by 1%, the firm value of pharmaceutical sub-sector companies listed on the Indonesia Stock Exchange for the 2018-2021 period will increase by 74.85%.

The coefficient value of the return on equity obtained is 0.9550. It shows that if the return on assets increases by 1%, the firm value of pharmaceutical sub-sector companies listed on the Indonesia Stock Exchange for the 2018-2021 period will increase by 95.5%. Coefficient value of the capital structure obtained is 0.6818. It shows that if the capital structure increases by 1%, the firm value of pharmaceutical sub-sector companies listed on the Indonesia Stock Exchange for the 2018-2021 period will increase by 68.18%. Coefficient value of the investment decision obtained is 0.0642. It shows that if the investment decision increases by 1%, the firm value of pharmaceutical sub-sector companies listed on the Indonesia Stock Exchange for the 2018-2021 period will increase by 6.42%. Coefficient value of the firm size obtained is 0.0863. It shows that if the investment decision increases by 1%, the firm value of pharmaceutical sub-sector companies listed on the Indonesia Stock Exchange for the 2018-2021 period will increase by 8.63%.
Discussions

The Effect of Return On Assets on Firm Value

The results indicate that the return on assets has a probability value lower than the significant level used and obtains a positive coefficient value. So, it concludes that return on assets positively and significantly influences firm value in pharmaceutical sub-sector companies listed on the Indonesia Stock Exchange during 2018-2021.

The results of this study are in line with the results of research previously conducted by Hidayati and Priyadi (2022) regarding the effect of profitability, liquidity, and investment decisions on firm value, where their research shows that return on assets positively and significantly influences firm value. Also, Halik (2018) claims that return on assets positively and significantly influences firm value.

The Effect of Return On Equity on Firm Value

The results indicate that the return on equity has a probability value lower than the significant level used and obtains a positive coefficient value. So, it concludes that return on equity positively and significantly influences firm value in pharmaceutical sub-sector companies listed on the Indonesia Stock Exchange during 2018-2021.

The results are similar to a previous study conducted by Sondakh et al. (2019) that return on equity positively and significantly affects firm value. Then, a previous study conducted by Ali et al. (2021) concerning the effect of profitability proxied by return on equity on firm value shows that return on equity positively and significantly influences firm value.

The Effect of Capital Structure on Firm Value

The results indicate that the capital structure has a probability value lower than the significant level used and obtains a positive coefficient value. So, it concludes that capital structure positively and significantly influences firm value in pharmaceutical sub-sector companies listed on the Indonesia Stock Exchange during 2018-2021.

The results are similar to those of Oktiwiati and Nurhayati (2020) regarding the effect of profitability, capital structure, and investment decision on firm value, which concludes that capital structure positively and significantly influences firm value. In addition, Julaeha et al. (2021) show the effect of profitability, capital structure, and investment decisions on company value and conclude that capital structure has a positive and significant effect on firm value.

The Effect of Investment Decisions on Firm Value

The results indicate that the investment decisions has a probability value higher than the significant level used. So, it concludes that investment decisions partially has no significantly influences firm value in pharmaceutical sub-sector companies listed on the Indonesia Stock Exchange during 2018-2021.

The results of this study are in line with the results of research previously conducted by Amaliyah and Herwiyanti (2020) concerning the effect of investment decisions, firm size, funding decisions, and dividend policies on firm value, where in their research concluded that investment decisions do not have a significant effect on firm value. Then, previous research by Salama et al. (2019) regarding the effect of investment decisions, funding decisions, and dividend policies on firm value indicates that investment decisions do not affect firm value.

The Effect of Firm Size on Firm Value

The results indicate that the firm size has a probability value higher than the significant level used. So, it concludes that firm size partially has no significantly influences firm value in pharmaceutical sub-sector companies listed on the Indonesia Stock Exchange during 2018-2021.

The results of this study are in line with the results of research previously conducted by Wahyuni and Purwaningsih (2021) regarding the effect of managerial ownership, firm size, profitability, dividend policy, investment decision, capital structure, and intellectual capital on firm value, where in his research concluded that Firm size does not affect firm value. Then, Nasution (2021), concerning the effect of investment decisions, profitability, and firm size on firm value, shows that firm size has no significant influence on firm value.
CONCLUSIONS
Based on the research results on the effect of profitability, capital structure, investment decisions, and firm size on firm value in the pharmaceutical sector listed on the Indonesia Stock Exchange, return on assets, return on equity, and capital structure positively and significantly affect firm value. Meanwhile, investment decisions and firm size have no significant effect on firm value in pharmaceutical sub-sector companies listed on the Indonesia Stock Exchange from 2018 to 2021.

REFERENCE


