The Effect of Investment Decision, Funding Decision, and Profitability on The Firm Value of Consumer Goods Industry Registered in Indonesia Stock Exchange During 2017-2020

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ABSTRACT
This research was conducted to find out whether 1) investment decision can affect the firm value 2) funding decision can affect the firm value 3) profitability can affect the firm value 4) investment decision, funding decision, and profitability can affect the firm value simultaneously. The research observations were 92 companies from the sample of 23 consumer goods industries listed on the Indonesia Stock Exchange in 2017-2020 using the purposive sampling technique. The research method used is multiple regression analysis on panel data with a fixed-effect model and processed using the EViews 10.0 software. The result shows all three variables can affect the firm value simultaneously, investment decision has a positive and significant effect on the firm value, funding decision has a positive and significant effect on the firm value, and profitability has a positive and insignificant effect on the firm value.

Keywords: Investment decision, funding decision, profitability, firm value

1. RESEARCH INTRODUCTION
The increasingly tight and competitive world economy as a result of the globalization era that continues to advance and develop makes every company strive to create strategies through various innovations. This is done as an effort to survive in the growth phase in the face of increasingly competitive competition with various competitors. In addition to strategy, investors have an important role in influencing the world economy in Indonesia [1]. The role of investors in the capital market can affect supply and demand in the capital market so that it can lead to an increase or decrease in the value of the company. Company value can be interpreted as an important basis that becomes a reference for companies that have gone public as well as to measure and assess the extent to which the company's ability and performance in creating demand and supply in the capital market through stock prices so that they can find out future growth and prospects [2]. From the demand and supply, the stock price increases, the higher the stock price, the higher the value of the company. The interest of investors to invest in related companies illustrates the company's performance both in terms of fundamentals and operations so that the company has good prospects for the future and growth. As a result, it can generate a positive signal for the company's external parties to invest and an increase in the value of the company. To measure how much the company's ability to create company growth, the company value is proxied by using Price Book Value. According to [3], a company can optimize its firm value if the company can implement the proper and good financial management functions. These financial management functions are related to investment decisions and funding decisions [4]. [5] state that a company must be able to make appropriate and wise investment decisions to anticipate risks that harm various parties, both internal and external parties of the company as investment decisions are one of the important factors related to investment. the company's assets in the hope that the current expenditure can generate feedback in the form of a high rate of return in the future. From a wise and appropriate attitude in deciding which investment will be made by the company, it can give a positive signal to investors to invest in related companies, so that it can lead to high company value. In this study, investment decisions will be measured using the Price Earnings Ratio (PER) to determine how much the company's ability to create prospects and company growth in addition to high profits [6]. Not only investment decisions, but funding decisions are also an important factor needed by every company to obtain funds through various alternative sources of effective funds to optimize and support the company's operational activities. If the company can determine wisely what funding decisions will be used, it can generate prospects and
future growth related to profits. The funding decision to be used by the company can be sourced from internal or external companies which will be proxied through the Debt to Equity Ratio (DER) to compare whether the most appropriate decision is using debt or equity. Meanwhile, profitability is also another important factor that can affect the value of the company which is to determine the company's ability to create profits related to asset management, sales, and own capital. If the company can create high profits, it can increase the value of the company. This is due to the emergence of positive signals given by the company through information in the form of financial statements that attract investors to invest in related companies. As a result, it creates demand and supply in the capital market and gains prosperity for shareholders in addition to increasing the value of the company. From this condition, profitability will be proxied through Return on Equity (ROE) where this ratio serves to measure the level of efficiency of net income from the use of own capital [7].

Relevant to Figure 1, shows that the average value of the consumer goods sector companies from various sub-sectors shows varied results where there is a significant increase and decrease every year. In 2017, the average firm value in the consumer goods sector was 4.83. In 2018, the average firm value in the consumer goods sector was 4.13 or decreased by 0.70 from the previous year. In 2019, the average value of consumer goods sector companies also decreased by 1.21 which was much higher than the previous year. Meanwhile, in 2020, the average value of companies in the consumer goods sector was 2.94 or started to increase by 0.02. From this phenomenon, it is indicated that every sub-sector of the consumer goods sector has increased and decreased every year. This decline in the value of the company could have an impact on investors' interest in investing in related companies. This is because investors have the perception that the decline in the value of the company indicates the poor performance of the company reported through the financial statements and has an impact on prospects.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1. Firm Value

[8] explained that firm value is an important factor for investors and external parties as material for consideration in making investment decisions. For this reason, the value of the company is very dependent on the investment decisions made by investors. According to [9], firm value is a condition that the company's goals have been achieved in maximizing shareholder profits as a form of trust from investors themselves in the related company after going through several processes from the start of the company's establishment to the present day. The achievement of company value shows the company's success in carrying out management functions, ranging from an organized organizational structure to good financial performance so that the company experiences growth and attracts investors to invest in the company. [10] define firm value as an important key seen by investors before making investment decisions. In this case, companies that can increase the value of their companies are considered successful in carrying out company activities and can attract investors to invest in the company.

2.2. Investment Decision

According to [11], the investment decision is one of the important factors that includes the company's actions on the allocation of funds related to asset investment to achieve its goals, both long-term and short-term goals. The allocation of funds to company assets is expected to provide feedback in the form of profits and prospects for future growth. Investment decisions made by the company are said to be right and successful if the company can create an increase in company value in addition to prosperity for investors, as well as stable conditions in the analysis of the company's financial performance [12]. This is because if investor prosperity is achieved, it indicates the company's ability to achieve its goals. In general, investor prosperity can be realized through the accuracy of investment activities carried out by the related company.

2.3. Funding Decision

[13] defines funding decisions as financial management decisions that are used as a combination of the most economical source of funds with the company's accuracy in funding investment needs. In determining what source of funds will be used by the company, it must be considered carefully because the composition of funding can affect the
value of the company [14]. In addition, [15] defines funding decisions as to the composition of funding that needs to be considered by company managers regarding the use of internal or external funding sources. Funding decisions with optimal composition can increase firm value.

2.4. Profitability

A high level of profitability indicates that the company is able and successful in making investment and funding decisions effectively and efficiently to make the company's financial condition good, grow, and develop. According to [16], profitability is a measure used to determine the level of a company's ability to achieve success in the form of profits through sales, equity, and total assets from investment activities carried out.

2.5. The Effect of Investment Decision on The Firm Value

Investment decisions are made by company managers regarding the allocation of various funds to obtain a rate of return in the form of profits. The better the considerations related to investment decisions, the higher the chances of obtaining profits and creating optimal financial performance. As a result, information in the form of the condition of the company's financial performance creates a positive signal, namely the perception of a good company reputation in the eyes of investors, thereby creating investor interest in investing and ultimately increasing the value of the company. In addition to increasing the value of the company, it also creates prosperity for potential investors. This statement is supported and in line with the research results of [17] and [18]. Based on the explanation above, the first hypothesis in this study is:

H1: Investment decision has a positive and significant effect on the firm value

2.6. The Effect of Funding Decision on The Firm Value

Funding decision is a decision taken by the company related to determining the accuracy of the source of funds in funding its operations so that it is effective and efficient and generates future growth through various investment alternatives. In determining what source of funds will be used by the company, it must be considered carefully because the composition of funding can affect the value of the company. Accuracy in choosing funding sources can increase firm value [19]. Sources of funding can be in the form of debt and equity. According to [20], if the company uses funding sources through debt, then the value of the company will decrease. This is due to the emergence of investor perception that the company prioritizes debt payments from the profits generated by the company rather than distributing dividends to shareholders. In addition, if the company uses funding sources through equity, then the company's financial risk is smaller than using debt funding sources because the company is not involved in debt and does not need to pay interest on the debt, so there is little chance of bankruptcy (financial distress), and the possibility of an increase in the value of the company. This is supported and in line with the research results of [21], [22], and [23] which state that the funding decision has a positive and significant effect on firm value. Based on the explanation above, the second hypothesis is:

H2: Funding decision has a positive and significant effect on the firm value

2.7. The Effect of Profitability on The Firm Value

According to [24], profitability is a measure of the company's success in achieving its goals through various measurements related to how much profit the company earns. The higher the profit earned by the company indicates good financial performance. This can trigger investor interest to invest in related companies. From the interest of investors to invest, it shows a good growth rate. As a result, the higher the return obtained by investors and an increase in the value of the company. This condition is reinforced by the results of research from several researchers, such as [25] [26] [27]. Based on the explanation above, the third hypothesis is:

H3: Profitability has a positive and significant effect on the firm value

3. RESEARCH METHODOLOGY

The research on this study is related to previous relevant research, such as (1) research on "The Effect of Investment Decisions, Dividend Policy and Profitability on Firm Value in the Indonesian Manufacturing Companies" in the study of Putri, et al., [28]. (2) research on “Is the Value of The Company Affected by Company Investment Decisions and Financing Decisions?” in the study of Tumiwa, et al., [21]. (3) research on “Effect of Funding Decisions on Firm Value with Profitability as Intervening Variables” in the study of Wahyuni, Alam & Paki [29].

In this study, researchers used descriptive research in the form of panel data. The panel data used is a combination of cross-section and time-series data. This research design is used to examine the effect of investment decisions, funding decisions, and profitability on firm value in consumer goods industrial companies listed on the Indonesia Stock Exchange for the 2017-2020 period. The type of data used is secondary data involving the financial statements of consumer goods industry companies that were published on the Indonesia Stock Exchange (IDX) for the period 2017-2020. In addition, the data collection method used is in the form of a documentation method, which is looking for data on the annual financial statements of companies that are research samples for the consumer goods industry listed on the Indonesia Stock Exchange according to the criteria for the 2017-2020 period which can be accessed through the...
www.idx.co.id. The object of research is the firm value which is proxied by Price Book Value as the dependent variable. Meanwhile, the independent variables used by the researchers in this study are investment decisions which are proxied through Price Earnings Ratio, funding decisions are proxied through Debt-to-Equity Ratio, and profitability is proxied through Return on Equity. The research subjects are consumer goods industrial companies listed on the Indonesia Stock Exchange for the 2017-2020 period. In addition, data analysis was carried out using EViews version 10 software with a sample selection technique in the form of purposive sampling based on predetermined criteria. Based on the criteria through a purposive sampling technique from 56 companies as a population, 23 consumer goods industry companies were selected as samples for a period of four years (2017-2020), so that the total sample was 92 companies. The following are the criteria for selecting the sample in this study: (1) Consumer goods industrial companies listed on the Indonesia Stock Exchange for the 2017-2020 period (2) Consumer goods industrial companies that provide complete information on annual financial reports after publication (3) Industrial companies consumer goods that do not attach negative company data values.

4. RESULT & DISCUSSIONS

To fulfil the requirements in panel data regression analysis, it is necessary to carry out several tests using the EViews10 software, such as descriptive statistical tests, panel data regression analysis, F test, T-test, Chow test, and Hausman test to choose which model is best used in the study. In this case, whether the common effect model, fixed effect model, or random-effect model and the classical assumption test in the form of a multicollinearity test.

Table 1 Descriptive Statistical Analysis Results

<table>
<thead>
<tr>
<th></th>
<th>PBV</th>
<th>PER</th>
<th>DER</th>
<th>ROE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>5.302609</td>
<td>28.15174</td>
<td>0.737065</td>
<td>0.342727</td>
</tr>
<tr>
<td>Median</td>
<td>1.975000</td>
<td>17.71500</td>
<td>0.520000</td>
<td>0.135000</td>
</tr>
<tr>
<td>Maximum</td>
<td>82.44000</td>
<td>237.9900</td>
<td>4.890000</td>
<td>14.50000</td>
</tr>
<tr>
<td>Minimum</td>
<td>0.250000</td>
<td>4.050000</td>
<td>0.090000</td>
<td>0.000900</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>12.28679</td>
<td>36.60258</td>
<td>0.732604</td>
<td>1.510214</td>
</tr>
<tr>
<td>Observations</td>
<td>92</td>
<td>92</td>
<td>92</td>
<td>92</td>
</tr>
</tbody>
</table>

In Table 1, it can be seen that the results of descriptive statistical analysis on firm value (PBV) show the mean value of 5.302609, the median value of 1.975000, and the standard deviation of 12.28679. The highest PBV value was achieved by UNVR in 2017 with a maximum value of 82.44000. Meanwhile, the company with the lowest PBV value is owned by WIIM in 2020 with a minimum value of 0.250000. The results of descriptive statistical analysis on investment decision (PER) show the mean value of 28.15174, the median value of 17.71500, and the standard deviation of 36.60258. The company with the highest PBV value was achieved by UNVR in 2017 with a maximum value of 237.9900. Meanwhile, the company with the lowest PBV value was owned by SKBM in 2017 with a maximum value of 4.890000. The company with the highest PBV value was achieved by KLBF in 2019 with a maximum value of 4.890000. Meanwhile, the company with the lowest PBV value was owned by SIDO in 2017 with a minimum value of 0.090000. The results of descriptive statistical analysis on funding decisions (DER) show the mean value of 0.737065, the median value of 0.520000, and the standard deviation of 0.732604. The company with the highest DER value was achieved by KLBF in 2019 with a maximum value of 4.890000. Meanwhile, the company with the lowest DER value was owned by SIDO in 2017 with a minimum value of 0.090000. The results of descriptive statistical analysis on profitability (ROE) show the mean value of 0.342727, the median value of 0.135000, and the standard deviation of 1.510214. The company with the highest ROE value was achieved by UNVR in 2020 with a maximum value of 14.50000. Meanwhile, the company with the lowest ROE value was owned by SKBM in 2019 with a minimum value of 0.000900.

Table 2 Fixed-Effect Model

<table>
<thead>
<tr>
<th>Variabel</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistics</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>4.539548</td>
<td>0.297505</td>
<td>15.25871</td>
<td>0.0000</td>
</tr>
<tr>
<td>PER</td>
<td>0.015312</td>
<td>0.004026</td>
<td>3.803416</td>
<td>0.0003</td>
</tr>
<tr>
<td>DER</td>
<td>0.275750</td>
<td>0.055229</td>
<td>4.992870</td>
<td>0.0000</td>
</tr>
<tr>
<td>ROE</td>
<td>0.375665</td>
<td>0.461491</td>
<td>0.814025</td>
<td>0.4186</td>
</tr>
</tbody>
</table>

Effects Specification
Cross-section fixed (dummy variables)

Weighted Statistics
Table 2 above shows the results of the test using the Fixed Effect Model as the most appropriate model from the previous test that researchers should use in panel data regression analysis. Based on the obtained coefficient results presented in the table of panel data regression analysis results, the panel data regression equation is described as follow:

\[ \text{PBV} = 4.539548 + 0.015312 \times \text{PER} + 0.275750 \times \text{DER} + 0.375665 \times \text{ROE} \]

The constant-coefficient value of the firm value (PBV) variable is 4.539548. These results show that if the investment decision (PER), funding decision (DER) and profitability (ROE) variables have increased by 1 unit and consider other independent variables constant, it means that firm value (PBV) will increase by 4.54%. The coefficient value on the investment decision variable (PER) is 0.015312. This result explains that if the investment decision (PER) variable increases by 1 unit, then the firm value (PBV) variable will also increase by 0.02%. The coefficient value on the firm value constant (PBV) and investment decision (PER), can also be seen in the above equation related to the exposure of the coefficient value of the funding decision variable (DER), which is 0.275750. These results show that if the funding decision variable (DER) increases by 1 unit, the firm value variable as proxied by PBV will increase by 0.28%. The coefficient value on the profitability (ROE) variable is 0.375665. This shows that if the profitability (ROE) variable increases by 1 unit, the firm value variable as proxied by PBV will also increase by 0.38%.

Based on the results of the statistical T-test in table 2 above, the probability value of the investment decision variable (PER) is 0.0003 <0.05 with the direction of the value of the positive coefficient being 0.015312 so that investment decision (PER) has a positive and significant effect on firm value (PBV). The independent variable, investment decision which is proxied by using the Price Earnings Ratio shows the results of data processing which states that investment decision has a positive and significant effect on firm value. Investment decisions related to the allocation of company sources of funds can directly affect the value of the company. Companies must properly consider the investment decisions taken to provide feedback in the form of profits for the company itself so that the company can operate properly. It is said to be important because the company's return or profit generally comes from the company's investment activities. If company managers can properly decide on investment activities related to company assets to create a high rate of return related to operational activities and other supporting activities, it can provide a positive signal for potential investors and other external parties. By signalling theory, the positive response obtained by potential investors and other outside parties can lead the company to growth and success. From a positive signal in the form of financial statement information from related companies, it can attract investors to invest, so that the higher the increase in investment decisions and the right policies in making them, the higher the increase in company finances. As a result, there is an increase in stock prices and leads to an increase in the value of the company. This condition proves that the more accurate the investment decision, the higher the company's growth because it gets the trust of potential investors. The more investors who invest their capital, the more expensive the stock price in the company. In the end, it creates an increase in the value of the company and the return obtained by investors. The results of the analysis obtained after going through various tests and analyses related to data processing prove Hypothesis 1 is accepted. The results of this study are also proven, supported, and in line with the results of several previous studies, such as [30, 31, 32], and [33] which state that investment decisions have a positive and significant effect on firm value. The probability value of the funding decision variable (DER) is 0.00000 <0.05 with the direction of the value of the positive coefficient being 0.275750 so that the funding decision (DER) has a positive and significant effect on the firm value (PBV). This states that Hypothesis 2 is accepted. The funding decisions used by the company will directly have an impact on the value of the company. The right funding decision will attract investors to invest and in the end, there will be an increase in stock prices and an increase in company value. Funding decisions related to the source of funding used by the company. The source of funding needs to be considered properly by the company whether it comes from internal or external to the company. From the results of data processing for the independent variable funding decision which is proxied through the Debt to Equity Ratio, it proves that the company prefers to finance its investment activities, manage, and develop operational and other supporting activities by using funding sources through the company's internal rather than external companies, so the hypothesis that has been formulated by the researcher was accepted. These results and statements are also in line with research results from several researchers, such as [21], [22], and [23].

The probability value of the profitability (ROE) variable is 0.4186 > 0.05 with a positive coefficient direction of 0.375665, so profitability (ROE) has a positive and insignificant effect on firm value (PBV) in consumer goods industry companies listed on the Indonesia Stock Exchange in the period 2017-2020. The results of data processing and analysis obtained after going through various tests prove that Hypothesis 3 is rejected. Profitability is not a reference or
benchmark for investors to invest in related companies. The high and low profitability obtained by a company does not have much influence on investor interest in investing, especially in consumer goods industry companies, but it can still increase the value of the company, although not so much. The ineffectiveness and inefficiency experienced by companies generally stem from the company's inability to manage equity related to earning profits and increasing company value. From the lack of effectiveness and efficiency of the company in managing and operating investments as well as to obtaining a high rate of return, it shows that there has been an increase in the value of the company, although not so much. From this condition, it can be seen that potential investors do not only study and see the profitability ratios as a basis for consideration for investing, but also look at other ratios. As a result, according to the theory of high and low profitability signals can directly give a signal to potential investors in deciding their considerations to invest in the related company or not and whether the signal is in the form of a positive signal or a negative signal. From this signal, potential investors can consider and decide to invest or otherwise not invest in the company. The results of this study are in line with the results of several previous studies, such as [34 and [35]. The adjusted R-Square result is 0.843242 or 84%. The calculation results show the coefficient of determination is close to 1 which can be interpreted as 84% of the dependent variable, such as firm value proxied through PBV can be explained by independent variables, investment decision (PER), funding decision (DER), and profitability (ROE), so that by obtaining a number close to 1, the greater the information provided by the independent variables on the dependent variable to predict the variation of the variable. In addition, the remaining 16% is explained by other variables outside the study. In addition, the value of Prob (F-Statistic) obtained from the results of data processing is 0.000000 or <0.05. Thus, it can be concluded that the independent variables, such as investment decisions, funding decisions, and profitability simultaneously have a significant effect on the dependent variable (firm value). It means that \( H_4 \) is accepted.

<table>
<thead>
<tr>
<th>Table 3 Multicollinearity Test Results</th>
<th>PER</th>
<th>DER</th>
<th>ROE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PER</td>
<td>1.000000</td>
<td>0.046298</td>
<td>0.041470</td>
</tr>
<tr>
<td>DER</td>
<td>0.046298</td>
<td>1.000000</td>
<td>0.397407</td>
</tr>
<tr>
<td>ROE</td>
<td>0.041470</td>
<td>0.397407</td>
<td>1.000000</td>
</tr>
</tbody>
</table>

Table 3 shows that between independent variables there is no multicollinearity where the results of data processing describe the number of each variable < 0.8 which indicates the independent variable used in the study does not occur multicollinearity in consumer goods industrial companies listed on the Indonesia Stock Exchanges for the period 2017-2020.

5. CONCLUSION & SUGGESTIONS FOR FUTURE RESEARCH

5.1. Conclusion

Based on the results of data processing, analysis, and discussion that has been carried out by researchers, it can be concluded: First, the independent variable in the form of investment decision (PER) has a positive and significant effect on firm value (PBV) in consumer goods industrial companies listed on the Indonesia Stock Exchange for the 2017-2020 period (\( H_1 \) is accepted). Second, the independent variable in the form of funding decision (DER) has a positive and significant effect on firm value (PBV) in consumer goods industry companies listed on the Indonesia Stock Exchange for the 2017-2020 period (\( H_2 \) is accepted). Third, the independent variable in the form of profitability (ROE) has a positive and insignificant effect on firm value (PBV) in consumer goods industrial companies listed on the Indonesia Stock Exchange for the 2017-2020 period (\( H_2 \) is accepted). Last, the independent variables in the form of investment decision (PER), funding decision (DER), and profitability (ROE) simultaneously have a significant effect on firm value (PBV) in consumer goods industry companies listed on the Indonesia Stock Exchange for the 2017-2020 period (\( H_4 \) is accepted).

5.2. Suggestions for Future Research

First, replace research subjects. This is due to the limitations in this study, researchers only used research subjects in the consumer goods industry. Second, using research subjects that do not only focus on one sub-sector but extend the research period. The longer the research period, the better the picture of the company’s development and condition will be. Third, adding other internal factors, such as dividend policy, firm size, leverage, growth company, and other external factors, such as inflation and interest rates. Fourth, using other proxies for each variable, for example, firm value using Tobin's Q, Price Earnings Ratio, and Market to Book Value, investment decision using Return on Assets, Fixed Asset Ratio, Total Asset Growth, and Current Assets to Total Assets, funding decisions use the Debt to Asset Ratio, and profitability uses the Return on Assets, Gross Profit Margin and Net Profit Margin proxies. Finally, the managers of consumer goods industry companies should be able to properly consider and pay attention to the profitability factor as the basis for making investment decisions even though the results of the research are not
significant. The manager of the consumer goods industry should be able to properly consider and pay attention to the profitability factor as the basis for making investment decisions even though the results of the research are not significant. However, this insignificance does not rule out the possibility for further researchers and future companies to obtain significant results. This is because insignificance may occur because the sample, subject, and timeframe are different from previous studies. Not only that, company managers, especially in the consumer goods sector, must pay attention and focus on investment decisions and funding decisions in managing and financing company operations so that they can run properly and attract investors' interest in generating profits in addition to increasing company value due to research results proves that these two factors have a significant effect on firm value.

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REFERENCES


