The Influence of Investment Decisions on Firm Value with Managerial Ownership as Mediation Effect

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ARTICLE INFO
Received 10 Juli 2023
Accepted 30 September 2023
Published 01 Oktober 2023

Keywords: firm value, investment decisions, managerial ownership

DOI: http://dx.doi.org/10.24036/jmpe.v6i3.14926

ABSTRACT
The study discusses the relationship between investment decisions, managerial ownership, and firm value in the manufacturing sector. This study points out that the manufacturing sector is a diverse and large-scale sector, yet the average stock price has declined in recent years. This phenomenon is interesting because there are many factors that can affect firm value, including investment decisions and managerial ownership, and previous research has produced inconsistent findings. To address this issue, the author conducted a quantitative research study using path analysis techniques and SmartPLS software version 4.0.8.8 and employed purposive sampling to select a sample. The results of the analysis indicate that investment decisions have no effect on firm value, but investment decisions have a positive effect on managerial ownership. Furthermore, managerial ownership has a positive effect on firm value and plays a positive mediating role in the relationship between investment decisions and firm value. The author acknowledges that the study has limitations, as it only focuses on investment decisions, managerial ownership, and firm value in the manufacturing sector. Future research should consider adding other variables or modifying the research model using moderation. Moreover, examining more than one sector is recommended to generalize the findings.

INTRODUCTION
All businesses are expected to endure the challenges of competing in the market. Competition compels companies to make various efforts to survive, including the need for
management to utilize the company’s entire capital to generate maximum profits. This, in turn, can add value to the company, as reflected in the stock value. Therefore, it is crucial for companies to maintain a stable or increasing stock value across all sectors, including manufacturing. However, manufacturing companies have exhibited poor performance in recent years, as evidenced by the challenges posed by the Covid-19 pandemic that began in early 2020 and continues to impact the industry.

The manufacturing sector has been impacted by the Covid-19 pandemic, resulting in a decline in the average stock prices of manufacturing companies from 2019 to 2021. Data from the 2021 factbook report of the Indonesia Stock Exchange shows that in 2019, the average stock price of manufacturing companies was Rp 3,875, which had decreased from Rp 4,740 in 2018. The decline continued, with an average stock price of Rp 2,560 in 2020 and Rp 2,125 in 2021. This decline in stock prices indicates reduced market interest in the company’s prospects, potentially leading to losses. Such decreased interest can create capital-related problems, making it challenging for the company to secure funding from third parties to sustain its business.

Figure 1. Average Price of Manufacturing Company Shares from 2016 to 2021
Source: Indonesia Stock Exchange, 2023

The fluctuation of a company’s value can be influenced by several factors, including investment decisions and managerial ownership. Investment is one of the financial planning choices made by many individuals with various goals. Therefore, investment is considered a crucial element in perfecting strategies to achieve high profits. The decision to choose a profitable project is determined through investment decisions. Investment decisions are actions taken by companies or financial managers to allocate funds into investments with the hope of obtaining future profits. Investment decisions involve understanding the relationship between expected returns and the risk of an investment. The relationship between risk and expected returns is linear, meaning that the higher the expected return, the greater the level of risk that needs to be considered. Expected return is the level of return that investors hope to receive in the future, while realized return is the level of return that investors have already obtained in the past. The
influence of investment decisions on a company's value indicates the company's ability to maximize investments in an effort to generate profits in line with the committed capital. Research conducted by Nelwan & Tulung (2018) and Puspitaningtyas & Puspita (2019) showed that investment decisions have a positive effect on a company's value, while research conducted by Ahmad et al. (2020) indicated that investment decisions do not affect a company's value. The above explanation highlights a research gap between investment decisions and firm value, inspiring researchers to investigate the connection between investment decisions and firm value once again, this time by including managerial ownership as a mediating variable. Researchers believe that managerial ownership may impact the relationship between investment decisions and firm value.

Signaling theory is relevant in the context of this research to explain the relationship between investment decisions, managerial ownership, and firm value. Signaling theory is a theory that explains how the sender (information owner) provides a signal or information that reflects the condition of a company, which is useful for the receiver (investor). Signaling theory helps us understand how companies communicate with shareholders and other stakeholders through actions and investment decisions (Oktiwiati & Nurhayati, 2020). In this research, companies use investment decisions as signals to the capital market and shareholders regarding the company's condition and prospects. Signaling theory explains why companies have an incentive to provide financial information to external parties, mainly due to information asymmetry, where companies possess more knowledge about the company and future prospects than external parties (investors and creditors) (Astika & Suryandari, 2019). Signaling theory recognizes the existence of asymmetric information between company management and shareholders. Therefore, they use investment decisions as a means to send signals to shareholders about the health of the company and its growth prospects. One way that companies can reduce information asymmetry is by providing signals to external parties. When the information is announced and potential investors (market players) have received it, they will first interpret the information as either a positive or negative signal. If the information is a positive signal, it will prompt potential investors to buy the company's shares, which will then be reflected in changes in stock trading volume. Overall, signaling theory provides a useful framework for understanding how individuals communicate information about themselves to others and how this information influences social interactions and relationships (Puspitaningtyas & Puspita, 2019).

In this research, managerial ownership is employed as a mediating variable, meaning it serves as an intermediary between investment decisions and company value. Signaling theory helps elucidate how managerial ownership can play a role in altering or amplifying the signals conveyed by a company through investment decisions. Signaling theory is also closely linked to fluctuations in stock prices. Sound or poor investment decisions can impact a company's stock price. Therefore, through signaling theory, this research can elucidate how investment decisions made by companies influence market perceptions and ultimately the value of the company's shares. By utilizing signaling theory, this research can offer a more comprehensive understanding of how investment decisions impact company value through the signal mechanisms received by
shareholders. This aids in clarifying the intricate dynamics within the relationship among investment, managerial ownership, and firm performance in the context of capital markets.

The firm's value represents its performance, as indicated by the stock price formed by market supply and demand, which reflects how society evaluates its performance (Lumoly et al., 2018). When the stock price is high, it increases the company's value, boosting the market's confidence in the current performance and future prospects of the company. The company's value is crucial as it demonstrates the amount of profit that the company can generate for its owners and investors. Financial decisions, including investment decisions, are critical for companies to optimize their value (Sunardi & Permana, 2019). The value of a company refers to a particular status that a company can attain, which is reflected in the stock market price of the company (Rahayu & Sari, 2018). Overall, firm value is an important metric that assists investors and analysts in assessing the financial health and potential of a company.

Investment decisions refer to the process of identifying potential investment opportunities and determining whether to allocate capital to those opportunities. Making an investment decision involves analyzing various factors, such as the potential risks and rewards of the investment, current market conditions, the economic climate, and the investor's financial goals and constraints. A manager's role includes making investment decisions, which involve investing capital in assets for the long term with the expectation of future profits (Sunardi & Permana, 2019). Such decisions are vital in a company's financial operations, particularly when it comes to expansion, opening new branches, or establishing new companies. Since investment decisions have long-term implications, they must be carefully evaluated. These decisions are often referred to as capital budgeting and are made with the anticipation of generating future profits. In this study, the Price Earnings Ratio (PER) is utilized to assess the potential earnings or profits of the company in the future. PER is a ratio that reflects the company's growth prospects, its level of risk, and its overall outlook (Lumoly et al., 2018).

A company's manager must make decisions that fully utilize the company's resources. If the manager acts solely in their own interests, it can pose a threat to the company. Shareholders have specific responsibilities and must understand the company's goals. Managerial ownership refers to a situation where a manager owns shares in the company. Managerial ownership indicates that the manager has a dual role. With this dual role, the manager aims to optimize the company's profits and avoids financial difficulties or bankruptcy, as such events could result in the loss of incentives and investments. Managerial ownership represents the proportion of a company's shares owned by its managers or executives. When managers own a significant portion of the company's stock, they have a greater financial stake in the company's success and are often more motivated to make decisions that enhance shareholder value (Astika & Suryandari, 2019). Having managers with substantial ownership stakes can also align the interests of shareholders and managers. This is because when managers own a significant portion of the company's stock, their interests are closely tied to the long-term success of the company. Consequently, they are less likely to make decisions that prioritize short-term gains over long-term value creation. Overall, the level of managerial ownership can significantly impact a company's performance and corporate governance. Companies should carefully consider the
appropriate level of managerial ownership and design compensation packages that align the interests of managers and shareholders.

When a company makes higher investment decisions, it tends to increase investor confidence, leading to an increased demand for the company’s shares and an increase in the firm’s value. Several studies, including Oktiwiati & Nurhayati (2020), Nelwan & Tulung (2018), Puspitaningtyas & Puspita (2019), have shown that investment decisions have a positive impact on a firm’s value. Based on the literature review and the results of the research, the following hypothesis is formulated:

H1: Investment decisions have a positive influence on firm value.

The higher the investment decision, the higher the managerial ownership will be. When a company decides to make a large-scale investment, it can affect the managerial ownership in the company. For example, if a company decides to invest using its internal funds, then the managerial ownership in the company will increase because they will be using funds from the company’s internal sources. Based on the literature review, the following hypothesis is formulated:

H2: Investment decisions have a positive influence on managerial ownership.

The higher the managerial ownership, the higher the firm’s value. One of the reasons why managerial ownership can increase the firm’s value is that it can enhance the motivation and involvement of managers in improving the company’s performance. Stock ownership can make managers feel like they have a stake in the company and share the same interests as other shareholders. Managerial ownership can also demonstrate the manager’s confidence in the company’s long-term prospects. If managers believe that the company will perform well in the future, they may be more inclined to purchase company shares, which, in turn, can increase the stock price and the market value of the company. Several studies, including those by Aditomo & Meidiyustiani (2023) and Rachmah & Iswara (2023), have shown that managerial ownership has a positive impact on a firm’s value. Based on the literature review and the results of the research, the following hypothesis is formulated:

H3: Managerial ownership have a positive influence on firm value.

The study examines how investment decisions affect the value of a company, and how the ownership of company management plays a role in mediating this relationship. The hypothesis suggests that when managers have a significant stake in the company, they will have the same interest as other shareholders in making investment decisions that increase the company’s value. By understanding this relationship, companies can make informed decisions about how to structure ownership and investment strategies to maximize shareholder value. Based on the literature review and the results of the research, the following hypothesis is formulated:

H4: Managerial ownership mediates the influence of investment decisions on firm value.

The aim of this research is to understand and analyze the influence of investment decisions on company value, by considering the role of managerial ownership as a mediating variable. Apart from that, this research also aims to contribute to academic literature in the field of financial management and corporate economics. By integrating signaling theory into the
analysis, this research seeks to expand our understanding of how investment decisions can influence firm value through communication and information mechanisms.

**RESEARCH METHOD**

This research is conducted using a quantitative methodology and secondary data gathered from the websites of 193 manufacturing companies listed on the Indonesia Stock Exchange. The primary source of data is the annual reports of each company, covering the period from 2019 to 2021. A purposive sampling technique is employed to select a representative sample of 63 companies based on predetermined criteria. The main objective of this research is to employ the sampling strategy to select a representative sample for further analysis. The sampling criteria are presented in Table 1.

<table>
<thead>
<tr>
<th>No.</th>
<th>Information</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2019-2021 period</td>
<td>193</td>
</tr>
<tr>
<td>2.</td>
<td>Manufacturing companies whose annual report data is not found during the 2019-2021 period</td>
<td>(32)</td>
</tr>
<tr>
<td>3.</td>
<td>Manufacturing companies that do not use the rupiah currency in their annual reports</td>
<td>(27)</td>
</tr>
<tr>
<td>4.</td>
<td>Manufacturing companies that do not have complete data</td>
<td>(71)</td>
</tr>
<tr>
<td></td>
<td>Total Research Sample</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>Total Years of Observation</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total Observational Data for 3 Years</td>
<td>189</td>
</tr>
</tbody>
</table>

*Source: Data Processed, 2023*

In this study, there were 193 manufacturing companies listed on the Indonesia Stock Exchange in 2021, and the sample size was limited to 63 companies based on predefined criteria. To obtain research results, hypothesis testing was conducted using the PLS approach with SmartPLS software version 4.0.8.8. After interpreting the analysis findings based on previous studies, conclusions were drawn, and recommendations for future research were provided. The variables used in this study consist of endogenous variables, namely firm value, and exogenous variables, namely investment decisions, as well as mediating variables, namely managerial ownership.

**Endogenous Variable:** An endogenous variable is a variable in a system that is determined by other variables within the same system. In other words, the value of an endogenous variable is affected by the values of other variables in the system. The endogenous variable in this study is firm value. Firm Value is measured by price book value (PBV). PBV can be calculated using the following formula: 

\[ PBV = \frac{\text{market price per share}}{\text{book value per share}}. \]

**Exogenous Variable:** An exogenous variable is a variable that is not determined by other variables in the system, but rather is affected by external factors. The exogenous variable in this study is
investment decisions. Investment Decisions is measured by Price Earning Ratio (PER). PER can be calculated using the following formula: \( \text{PER} = \frac{\text{market price per share}}{\text{earning per share}} \).

Mediating Variable: A mediating variable, also known as a mediator, is a variable that explains the relationship between two other variables. In other words, it is a variable that comes between the exogenous variable (the cause) and the endogenous variable (the effect) in a statistical model, and helps to explain how the independent variable affects the dependent variable. Mediating variables are important in research because they can provide insight into the underlying mechanisms that drive relationships between variables. They can also help researchers to develop more effective interventions by identifying key factors that influence outcomes. The mediating variable in this study is Managerial Ownership (MOWN). MOWN can be calculated using the following formula: \( \text{MOWN} = \frac{\text{number of managerial shares}}{\text{number of shares outstanding}} \).

RESULTS AND DISCUSSION

After analyzing the data using SmartPLS software, several findings were obtained, which are explained in the following table.

Table 2. Descriptive Statistics

<table>
<thead>
<tr>
<th>Construct</th>
<th>Min.</th>
<th>Max.</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>PER</td>
<td>-12000.00</td>
<td>1421.77</td>
<td>-148.17</td>
<td>1366.14</td>
</tr>
<tr>
<td>MOWN</td>
<td>0.00</td>
<td>1.02</td>
<td>0.24</td>
<td>0.30</td>
</tr>
<tr>
<td>PBV</td>
<td>-21.15</td>
<td>82.37</td>
<td>3.53</td>
<td>9.68</td>
</tr>
</tbody>
</table>

Source: Data Processed, 2023

The above table summarizes the state and attributes of data for the variables being studied, including their minimum and maximum values, as well as their mean and standard deviation.

Table 3. Summary of Hypotheses Testing

<table>
<thead>
<tr>
<th>H</th>
<th>Path</th>
<th>O</th>
<th>STDEV</th>
<th>TS</th>
<th>PV</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>PER -&gt; PBV</td>
<td>0.041</td>
<td>0.157</td>
<td>0.26</td>
<td>0.397</td>
<td>NS</td>
</tr>
<tr>
<td>H2</td>
<td>PER -&gt; MOWN</td>
<td>0.096</td>
<td>0.03</td>
<td>3.221</td>
<td>0.001</td>
<td>S</td>
</tr>
<tr>
<td>H3</td>
<td>MOWN -&gt; PBV</td>
<td>0.272</td>
<td>0.112</td>
<td>2.425</td>
<td>0.008</td>
<td>S</td>
</tr>
<tr>
<td>H4</td>
<td>PER -&gt; MOWN -&gt; PBV</td>
<td>0.026</td>
<td>0.013</td>
<td>1.947</td>
<td>0.026</td>
<td>S</td>
</tr>
</tbody>
</table>

Source: Data Processed, 2023

Note. H = Hypothesis, O = Original Sample, STDEV = Standard deviation, TS = T Statistics, PV = P Values, S = Supported, NS = Not Supported.

The table above shows the results of a hypothesis testing, which revealed that out of the four hypotheses tested, three were found to be valid and one was found to be invalid at a significance level of 5%.
The Influence of Investment Decisions on Firm Value

The first hypothesis test showed that the P-value was 0.397, which is less than the significance level (0.05), leading to the rejection of the hypothesis. This implies that investment decisions do not have an impact on the company’s value. The study found that even if investors or shareholders increase their investment decisions, it will not always affect the company’s value due to external risk factors such as exchange rate changes, inflation, and interest rates. These risk factors cannot be managed, and their magnitude cannot be determined, but they have a significant contribution to changes in the company’s value. Although investment decisions are important for the financial health and long-term performance of a company, they do not directly affect firm value. This finding is consistent with research conducted by Rahma & Arifin (2022), Komala et al. (2021) and Rafi et al. (2021), which also found that investment decisions do not affect firm value.

The Influence of Investment Decisions on Managerial Ownership

The second Hypothesis Test showed that the P-value was 0.001, which is less than the significance level (0.05), indicating the acceptance of the second hypothesis. This implies that investment decisions affect managerial ownership. Managers usually receive financial rewards based on company performance, such as stock options or performance bonuses. Therefore, when investment decisions lead to improved company performance, managers will receive larger incentives, motivating them to make better investment decisions for the company’s success. When a company makes a significant investment, it may impact managerial ownership within the organization. If the company uses its own resources for the investment, then managerial ownership will increase because internal funds are utilized. Alternatively, if external parties such as investors or creditors provide the funds, managerial ownership can still increase since these parties usually require managerial approval before providing the funds. In both cases, managerial ownership increases, providing managers with a stronger position to make investment decisions. This increased ownership can lead to benefits for the company, including enhanced motivation and responsibility among management, as well as improved company performance (Barokah & Putra, 2020).

The Influence of Managerial Ownership on Firm Value

The third Hypothesis Test yielded a P-value of 0.008, which is less than the significance level (0.05), indicating the acceptance of the third hypothesis. This implies that owning shares as a manager has a favorable impact on a company’s value. Managers can increase their authority within the firm by owning more stocks, which leads to more influential involvement in shaping corporate policies and strategic decisions. Significant managerial ownership also boosts managers’ confidence to take calculated risks that enhance the firm’s value. The higher the ownership held by managers in a company, the greater their stake in its performance. This motivates them to focus on improving the company’s performance and achieving long-term goals, rather than just short-term profits. As a result, the interests of management and shareholders are better aligned, reducing conflicts of interest. Over time, improving the
company’s performance enhances investor confidence, potentially increasing demand for the company’s stock and its price. This increased ownership signals to investors that management is committed to enhancing the company’s performance. Furthermore, managerial ownership can benefit a company by improving efficiency and reducing agency costs, as managers prioritize shareholder interests and take actions that maximize the company’s value. Thus, high managerial ownership can have a positive impact on a company’s value, enhancing its performance, boosting investor confidence, and improving efficiency. This finding is consistent with research conducted by Nasution et al. (2023), Butar-Butar (2023), Akyunina & Kurnia (2021), Fana & Prena (2021), Widayanti & Yadnya (2020), Dewi & Abundanti (2019), Christiani & Herawaty (2019), which also suggests that managerial ownership has a positive effect on firm value.

Mediation Effects of Managerial Ownership on Investment Decisions on Firm Value

The results of the fourth Hypothesis Test showed that the P-value of 0.026 was less than the significance level of 0.05, indicating the acceptance of the fourth hypothesis. This suggests that managerial ownership plays a mediating role in the relationship between investment decisions and firm value. Making appropriate investment decisions can improve a company’s value, benefiting shareholders, including management who holds shares in the company (Arianti & Anwar, 2020). Therefore, managers share the same interests as other shareholders in increasing the company’s value. Good investment decisions can enhance the company’s value and performance, motivating managers to increase their ownership stake in the company. This can provide managers with greater financial incentives and control in making strategic decisions, ultimately leading to positive impacts on the company’s overall performance. Signaling theory assumes that managerial ownership creates information asymmetry between company management and shareholders. Managerial ownership gives managers greater access to internal company information. Therefore, managerial ownership serves as a potentially valuable source of information for shareholders. Signaling theory explains how managerial ownership can act as a mechanism that amplifies positive signals sent by a company through investment decisions, which in turn can influence market perceptions and company value (Astika & Suryandari, 2019). This finding is consistent with research conducted by Rachmah & Iswara (2023), Arianti & Anwar (2020), Dewi & Abundanti (2019).

CONCLUSION

Based on data analysis and empirical research, the following conclusions can be drawn: 1) Investment decisions do not have an impact on firm value, 2) Investment decisions have a positive effect on managerial ownership, 3) Managerial ownership has a positive effect on firm value, 4) Managerial ownership mediates the relationship between investment decisions and firm value.

The research conducted encountered certain limitations. These limitations can serve as a guide for future researchers exploring related topics. Two primary limitations of this study were identified. Firstly, the limited sample size may restrict the generalization of research findings to
a larger population. Secondly, incomplete data that was not included in the research sample may limit the analysis of data and the conclusions that can be drawn.

This research has some limitations, and it is recommended that future researchers address these limitations by incorporating additional variables, such as control variables, into their research. Additionally, future researchers should increase the number of observations and extend the study’s duration. Furthermore, it is suggested that researchers modify the research model by incorporating moderating variables.

REFERENCES


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