The Effect of Investment Decisions and Funding Decisions on Firm Value with Dividend Policy as a Mediating Variable
(Case Study of Manufacturing Companies Listed on the Indonesia Stock Exchange 2017-2020)

Moh. Faris Akbar Alam Syah*, Budi Rahayu, Sasi Utami

Universitas Kadiri, Indonesia
**Corresponding author. Email: alamsyahfaris372@gmail.com*

ABSTRACT
This study analyzes the impact of investment decisions, funding, and dividend policy on firm value in manufacturing companies on the IDX (2017-2020). The results show that investment decisions have a significant effect on firm value, while dividend policy has a lower impact. This study provides important insights into the factors that influence firm value in Indonesia's manufacturing industry. Amid economic challenges, such as the COVID-19 pandemic, an understanding of the relationship between investment decisions, funding, dividend policy, and firm value helps companies strengthen their financial position. In conclusion, investment decisions determine firm value, while dividend policy has limited impact.

Keywords: *Investment decisions, funding decisions, firm value and dividend policy.*

1. INTRODUCTION

In January 2020, Coronavirus Disease 2019 (COVID-19) broke out in China and quickly spread across the country and the world (Jiang et al., 2021). Over the past few decades, countries around the world have experienced tremendous economic growth caused by international trade, foreign investment, and globalization (Au Yong & Laing, 2021). The COVID-19 pandemic has been one of the most devastating events in modern history, shaking the foundations of the global economy at large. Border closures, travel restrictions, and business shutdowns have disrupted global supply chains and undermined economic growth across multiple sectors (Wangke, 2021). Uncertainty surrounding the pandemic has lowered consumer and investor confidence, causing significant market volatility, while millions of people have lost their jobs or experienced reduced income due to lockdowns and social restrictions (Dadek et al., 2023).

A significant decline in major capital market indices, such as the JCI, reflects investors' uncertainty about the country's and companies' economic prospects amid the pandemic (Darmayanti et al., 2020). In addition, the spread of COVID-19 has also affected the performance of companies listed on the stock exchange. Many companies have experienced a decline in revenue and profits due to restrictions on economic activities imposed to control the spread of the virus (Saraswati, 2020). This causes investors to lose confidence in the company's growth prospects, which is then reflected in a decrease in stock value and trading activity in the capital market (Just & Echaust, 2020).

Firm value, which is market value, is a benchmark for investors to evaluate the efficiency and effectiveness of the company in creating added value for shareholders (Prasetyorini, 2013). A high stock price reflects good company value, being an important indicator for investors in assessing the company as a whole (Brigham & Houston, 2019). Measurement of firm value using the Price to Book Value (PBV) ratio, is one of the important methods in measuring firm value because it compares the stock market price with the book value of the stock, reflects investors' assessment of the company's future prospects, and describes the intrinsic value based on the assets owned (Copeland & Weston, 1992; Mohanasundari & Priya, 2016).

Manufacturing firms are the backbone of Indonesia's industrial sector, consistently contributing a large share of Gross Domestic Product (GDP) and creating millions of jobs (Kuncoro, 2000). They create added value through the production of a wide array of consumer and industrial goods. In the context of globalization, these firms continuously strive to improve productivity and competitiveness to remain relevant in domestic and international markets (Winarno, 2008). Understanding the statistics of their contribution is important for formulating economic policies and sustainable industrial development in Indonesia.

Investment decisions are an important aspect of a company's financial management that affects its direction and financial health (Velnampy, 2013). It involves allocating resources to investment projects that are expected to generate positive cash flows in the future, with complex considerations related to project selection, risk analysis, and funding (Sutaguna et al., 2023). It is important for companies to deeply understand investment decisions in order to achieve sustainable growth, create added value, and manage risks. Investment decisions can also act as a transmission mechanism between ownership and firm value (Jensen & Meckling, 1976).

The funding decision is a key decision regarding the firm's source of funds, which affects the firm's value through its capital structure. It involves choosing the right source of funds, such as equity or debt capital, with different implications for the cost of capital and financial risk (J. C. Van Horne, 2001). The right capital structure can increase firm value, but excessive use of debt can increase financial risk. Management needs to find a balance between equity and debt capital to maximize firm value in the long run (Brigham & Daves, 2014).

Dividend policy as a mediating variable plays a key role in linking investment decisions, funding decisions, and firm value. By signaling to investors about the firm's performance and future prospects, a consistent and predictable dividend policy can increase investor confidence, reduce uncertainty, and ultimately increase firm valuation and influence stock prices and investment decisions (Copeland & Weston, 1992).

Based on the background that has been conveyed and with the existence of research and theory gaps that still show contradictory results regarding the relationship between variables, in this study researchers will analyze the effect of investment decisions and funding decisions on firm value with dividend policy as a mediating variable.

2. LITERATURE REVIEW

2.1. Company Value

The corporate finance literature has undergone rapid development, with research highlighting factors and methods of assessing firm value (Salvatore, 2013). The Modigliani-Miller model emphasizes the importance of future net cash flows, but research shows that capital structure and financial policies also affect firm value. Factors such as firm size, profitability, liquidity, market risk, economic conditions, and dividend policy, which are complex and varied, also impact firm value (DEWI, 2023). Although still a subject of debate, this literature provides important insights for practitioners and researchers in understanding the dynamics of firm value and its implications on corporate decision-making.

2.2. Investment Decision

Investment decision is a crucial process in financial management that involves the allocation of company resources to projects that are expected to generate positive cash flows in the future (Sapruwan et al., 2024). Investment decisions are influenced by factors such as the firm's strategic objectives, market conditions, interest rates, and capital requirements (V. Horne & Wachowicz, 2008). By understanding the financial and strategic implications of investment decisions, financial managers can make smart decisions to optimize firm value and maximize long-term profits, with the goal of maximizing shareholder wealth through the Net Present Value (NPV) of the project and its impact on the market price of equity (Hill, 2015).

2.3 Funding Decision

Funding decisions involve the selection of a company's source of funds, which consists of internal (equity) and external (debt) sources (J. C. Van Horne, 2001). It plays an important role in determining the company's ability to expand, innovate, and capitalize on market opportunities (Adrianingtyas, 2019). By planning an efficient capital structure, companies can ensure adequate access to funds for long-term growth (Brigham & Daves, 2014). Therefore, funding decisions are strategic considerations that affect a company's financial health and future in the market.

2.4 Dividend Policy

Dividend policy is an important financial strategy for companies in distributing profits to shareholders. Dividend-related considerations involve the complexity between a firm's need for liquidity, investment in growth, and investors' expectations of return on investment (Copeland & Weston, 1992). The right dividend policy can increase investor confidence, provide positive signals about the company's performance, and increase the value of the company in the long run. Stable and consistent dividends tend to increase the attractiveness of the company's investment in the eyes of investors, which can result in an increase in stock prices. Conversely, an inconsistent or too low dividend policy may create uncertainty and lower investor interest, negatively impacting stock prices (Broyles, 2003). Thus, the conceptual framework formed as shown in Figure 1.

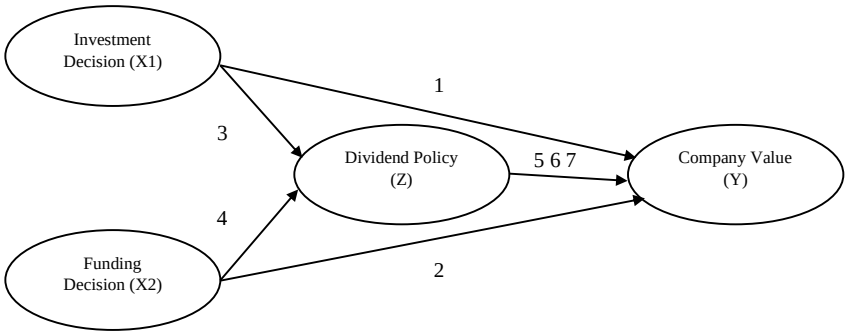

Figure 1 Research Conceptual Framework

3. METHODS

This research uses a quantitative approach, which emphasizes the collection and analysis of numerical data to answer research questions and test hypotheses. This approach prioritizes objectivity, with researchers seeking to collect objectively measurable data to make conclusions that can be applied broadly. Quantitative data analysis methods include a variety of statistical techniques, from simple descriptive analysis to more complex regression and multivariate analysis (Singarimbun, 2006). The research was conducted in manufacturing companies listed on the Indonesia Stock Exchange (IDX). Data was collected from financial reports, annual reports. This study uses a population of manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the 2017-2020 period. Table 1 shows the summary list of manufacturing companies listed on the IDX for the 2017-2020 period.

Table 1. Summary List of Manufacturing Companies 2017-2020

No	Manufacturing Company Sub Sector	Total
1	Basic Industry and Chemicals	75
2	Various Industries	52
3	Consumer Goods Industry	51
Total Company		178

The purposive sampling technique is chosen deliberately by the researcher based on certain characteristics of the population, selecting samples that are considered the most relevant or representative according to the research objectives and analysis. This allows researchers to obtain the most useful or meaningful information even though it does not represent the entire population (Sekaran & Bougie, 2014).In research on manufacturing companies listed on the Indonesia Stock Exchange during the 2017-2020 period, purposive sampling techniques were used to select companies that were considered most relevant to the research objectives. The selection criteria included the existence of the company during the period, the issuance of complete financial statements, and a consistent dividend distribution policy. With 20 companies meeting these criteria, the study used 80 observations to ensure an accurate picture of the effect of investment decisions, funding decisions, and dividend policy on firm value in the context of manufacturing companies in Indonesia.

Variable measurement is carried out using Total asset growth refers to the percentage of total asset growth of a company from a certain period of time to another period of time; Debt to Equity Ratio (DER) is a financial ratio that measures how much a company uses debt versus equity capital to finance its operations. This ratio is calculated by dividing a company's total debt by its total equity; Price to Book Value (PBV) is a financial ratio that compares the market price of a company's stock to the book value of its equity per share. The book value of equity is calculated by dividing the company's total equity by the number of shares outstanding; and Dividend Payout Ratio is a financial ratio that measures the percentage of a company's net income that is distributed as dividends to shareholders. This ratio is calculated by dividing the amount of dividends paid by the company by its net income.

The document data collection technique involves collecting data from written or electronic sources, such as the company's annual financial statements taken from the official website of the Indonesia Stock Exchange or the company's website. The data analysis method in this study includes descriptive statistics to explain the data, classical assumption test to check assumptions, hypothesis testing using multiple linear regression to test the relationship between variables, and the coefficient of determination to evaluate the fit of the model.

4. RESULTS

4.1. Descriptive Statistical Analysis

Descriptive statistics provide a brief and clear picture of the characteristics of the data, including distribution, patterns, central tendency, and spread. It helps the researcher understand the nature of the data, lays the groundwork for further statistical analysis, and makes it easier to present the results of the study so that they are better understood by the reader.

Table 2. Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Investment Decision	20	0,140	2,580	0,75000	0,644776
Funding Decision	20	0,180	37,610	3,37937	6,498468
Dividend Policy	20	0,110	0,760	0,39062	0,167908
Company Value (PBV)	20	0,130	11,200	2,08719	2,321212

Source: Secondary Data Processed

The results of the descriptive statistics in Table 2 show significant variation in the four observed variables. Investment decisions have a mean of 0.75 and a standard deviation of 0.64, indicating a fairly high level of variation. Funding decisions have a mean of 3.38 with a higher standard deviation, indicating significant variation among firms. Dividend policy has a mean of 0.39, indicating the tendency of companies to retain earnings as reserves. Firm value (PBV) shows large variation, with a mean of 2.09 and a standard deviation of 2.32, indicating significant variation in the market's assessment of firm value.

4.2. Classical Assumption Test

The function of the classical assumption test is to check whether the data used meets the basic assumptions of the statistical analysis used, such as normality, homogeneity of variance, multicollinearity, and independence. By ensuring these assumptions are met, the results of the analysis become more reliable and valid.

4.2.1. Multicollinearity Test

Table 3. Multicollinearity Test Results

Variable	Multicollinearity Test			
	Dividend Policy		Company Value	
	Tol.	VIF	Tol.	VIF
Investment Decision	0,993	1,007	0,934	1,071
Funding Decision	0,878	1,139	0,726	1,377
Dividend Policy			0,705	1,419

The multicollinearity test results in Table 3 show no significant indication of multicollinearity between the independent variables in the regression model. High tolerance and low Variance Inflation Factor (VIF) confirmed the absence of a strong linear relationship between the independent variables. Thus, the multicollinearity assumption is met, validating the regression analysis results to be interpreted more reliably and validly.

4.2.2. Heteroscedasticity Test

Homoscedasticity indicates constant residual variance, while heteroscedasticity indicates inconsistent variation. Significance above 0.05 indicates the absence of heteroscedasticity, ≤ 0.05 indicates a potential problem. With this understanding, data analysis can be performed more accurately for informed decisions.

4.2.3. Autocorrelation Test

The autocorrelation test evaluates the correlation between successive values in the data or time series. A common method is the Durbin-Watson test, with statistical values falling in the range 0-4. Values close to 0 indicate positive autocorrelation, while values close to 4 indicate negative autocorrelation. The results of this test are crucial to ensure the accuracy of the statistical model built.

4.3. Hypothesis Test

4.3.1. Coefficient of Determination Analysis (R^2)

The purpose of the coefficient of determination analysis is to determine how well the linear regression model explains the variation in the dependent variable using the independent variables. It helps evaluate the performance of the model and how well it fits the empirical data (see Table 4).

Table 4. Coefficient of Determination Analysis Results

No.	Independent Variable	Dependent Variable	R Square	F Test	Sig.	Note
Pers.1	Investment Decision	Dividend Policy	0,295	3,098	0,019	Significance Value < 0,05
	Funding Decision					
Pers.2	Investment Decision	Company Value	0,692	15,194	0,000	Significance Value < 0,05
	Funding Decision					
	Dividend Policy					

Source: Secondary Data Processed

Two regression models are evaluated in this analysis. First, model Pers.1 shows that Investment Decision and Dividend Policy explain approximately 29.5% of the variation in firm value. The F-test shows the overall significance of this model (p=0.019), indicating at least one independent variable has a significant impact. Second, model Pers.2 shows that Investment Decision explains about 69.2% of the variation in firm value. The F-test shows the overall significance of this model ($p < 0.001$), confirming the significant impact of Investment Decision. In conclusion, Investment Decision has a significant impact on firm value, while Dividend Policy is insignificant in the Pers.1 model. This provides important insights into the factors that influence firm value in the context of this study.

4.3.2. F Test (Simultaneous)

The F-test results show significant differences between the groups in both regression models. In the first model, at least one independent variable has a significant impact on the Dividend Policy dependent variable ($p = 0.019$). Likewise, in the second model, at least one independent variable has a significant impact on the dependent variable Firm Value (PBV) ($p < 0.001$). This confirms that both regression models are overall significant and the independent variables have a significant impact on the dependent variable.

5. CONCLUSION

From the previous discussion, it is concluded that the independent variables studied include Investment Decision, Funding Decision, and Dividend Policy, with the dependent variable of Firm Value (PBV). The analysis results show that the regression model with Investment Decision as the independent variable explains most of the variation in PBV, while the model with Dividend Policy shows a lesser influence. The F-test confirms the significance of the overall model, indicating that at least one independent variable has a significant impact on PBV. Thus, Investment Decision has a significant impact on PBV, while Dividend Policy has a lesser influence. This conclusion provides important insights into the factors that influence firm value in the context of manufacturing companies listed on the Indonesia Stock Exchange for the 2017-2020 period.

REFERENCES

Adrianingtyas, D. A. (2019). Pengaruh Kinerja Keuangan dan Keputusan Investasi Terhadap Nilai Perusahaan Dengan Kebijakan Dividen Sebagai Variabel Intervening. *JEKPEND: Jurnal Ekonomi Dan Pendidikan*, *2*(2), 23. https://doi.org/10.26858/jekpend.v2i2.9369

Au Yong, H. H., & Laing, E. (2021). Stock market reaction to COVID-19: Evidence from U.S. Firms' International exposure. *International Review of Financial Analysis*, *76*(August 2020), 101656. https://doi.org/10.1016/j.irfa.2020.101656

Brigham, E. F., & Daves, P. R. (2014). Intermediate financial management. In *The British Accounting Review* (9th ed., Vol. 21, Issue 3). Thomson. https://doi.org/10.1016/0890-8389(89)90100-5

Brigham, & Houston. (2019). Fundamentals of Financial Management. In *The Journal of Finance* (15th ed., Vol. 34, Issue 5). Cengage Learning. https://doi.org/10.2307/2327254

Broyles, J. (2003). Financial Management and Real Options. In □□□□□□*: Vol.* □□□□ □ (Issue ثقثقثق). Wiley & Sons Ltd, The Atrium, Southern Gate, Chichester, West Sussex PO19 8SQ, England,.

Copeland, T. E., & Weston, J. F. (1992). Financial Theory and Corporate Policy. In *The Journal of Finance* (Vol. 35, Issue 3). ADDISON-WESLEY PUBLISHING COMPANY. https://doi.org/10.2307/2327506

Dadek, T. A., Jalil, H., Syahbandir, M., & Kadir, M. Y. A. (2023). *Politik Hukum Penanggulangan Wabah (Covid-19) di Indonesia*. Syiah Kuala University Press.

Darmayanti, N., Mildawati, T., & Susilowati, F. D. (2020). Dampak Covid-19 terhadap perubahan harga dan return saham. *EKUITAS (Jurnal Ekonomi Dan Keuangan)*, *4*(4), 462–480.

DEWI, K. G. S. (2023). *PENGARUH LIKUIDITAS, LEVERAGE, UKURAN PERUSAHAAN, KEBIJAKAN DIVIDEN DAN PERTUMBUHAN PERUSAHAAN TERHADAP NILAI PERUSAHAAN PADA PERUSAHAAN PERBANKAN DI BURSA EFEK INDONESIA 2019-2021*. Universitas Mahasaraswati Denpasar.

Hill, R. A. (2015). The World of Modigliani and Miller. In *Bookboon*.

Horne, V., & Wachowicz. (2008). Fundamental of Financial management. In *Professional Housing Management Practices in Hong Kong* (13th ed.). Pearson Education. https://doi.org/10.5005/jp/books/10677_12

Jiang, J., Hou, J., Wang, C., & Liu, H. Y. (2021). COVID-19 impact on firm investment—Evidence from Chinese publicly listed firms. *Journal of Asian Economics*, *75*(February 2020), 1–16. https://doi.org/10.1016/j.asieco.2021.101320

Just, M., & Echaust, K. (2020). Stock market returns, volatility, correlation and liquidity during the COVID-19 crisis: Evidence from the Markov switching approach. *Finance Research Letters*, *37*(July), 101775. https://doi.org/10.1016/j.frl.2020.101775

Kuncoro, M. (2000). Usaha Kecil di Indonesia: Profil, masalah dan strategi pemberdayaan. *Sumber*, *7*(1), 6–8.

Meckling, W. H., & Jensen, M. C. (1976). Theory of the Firm. Managerial Behavior, Agency Costs and Ownership Structure.

Mohanasundari, & Priya. (2016). Dividend Policy and Its Impact on Firm Value: A Review of Theories and Empirical Evidence. *ApeejayJournal of Management Sciences and Technology*, *3*(3), 59–69.

Prasetyorini, B. F. (2013). Pengaruh ukuran perusahaan, leverage, price earning ratio dan profitabilitas terhadap nilai perusahaan. *Jurnal Ilmu Manajemen*, *1*(1), 183–196.

Salvatore, D. (2013). International Economics. In J. Hollenbeck (Ed.), *Nuevos sistemas de comunicación e información* (11th ed.). United States of America.

Sapruwan, M., Irawanty, W. S., Khoiriyah, L., Bete, A., & Novia, F. (2024). ANALISIS STRATEGI MANAJEMEN KEUANGA N DALAM MENINGKATKAN KINERJA FINANSIAL PERUSAHAAN STUDI KASUS PADA PT. UNILEVER INDONESIA. *Neraca: Jurnal Ekonomi, Manajemen Dan Akuntansi*, *2*(2), 67–83.

Saraswati, H. (2020). Dampak Pandemi Covid-19 Terhadap Pasar Saham Di Indonesia. *JAD: Jurnal Riset Akuntansi Dan Keuangan Dewantara*, *3*(2), 153–163.

Sekaran, U., & Bougie, R. (2014). Reaearch Methods for Business. In *Wiley* (7th ed.). Wiley & Sons Ltd, The Atrium, Southern Gate, Chichester, West Sussex PO19 8SQ, England,. https://doi.org/10.1007/978-94-007-0753-5_102084

Singarimbun. (2006). Metode Penelitian Survai. *Pemikiran Islam Di Malaysia: Sejarah Dan Aliran*, 192.

Sutaguna, I. N. T., Par, S. S. T., Par, M., Ali, I. H., Dewi, N. N., Errie Margery, S. E., Pipit Sundari, S. E., Agung, I. G. A., Widodo, M. H., & Si, S. E. M. (2023). *Ekonomi bisnis*. Cendikia Mulia Mandiri.

Van Horne, J. C. (2001). Financial Management and Policy. In *The Journal of Finance* (Twelfth Ed, Vol. 24, Issue 3). Prentice Hall. https://doi.org/10.2307/2325369

Velnampy, P. T. (2013). Corporate Governance and Firm Performance : A Study of Sri Lankan Manufacturing Companies. *Journal of Economics and Sustainable Development*, *4*(3), 228–236.

Wangke, H. (2021). *Diplomasi digital dan kebijakan luar negeri Indonesia*. Yayasan Pustaka Obor Indonesia.

Winarno, B. (2008). *Globalisasi: Peluang atau ancaman bagi Indonesia*. Erlangga.