



# The Effect of Profitability on Company Value Through Dividend Policy in Pharmaceutical Companies in Indonesia

Dwi Rahmawati Utami<sup>1</sup>, Parawiyati<sup>2</sup>, Sihwahjoeni<sup>3</sup>

<sup>1</sup>Students of Graduate Program at University of Merdeka Malang, Indonesia

<sup>2,3</sup>Lecturer of the Faculty of Economics and Business, University of Merdeka Malang, Indonesia

## ABSTRACT

*Firm value is the success of the company which is often associated with stock prices. This study aims to analyze the effect of profitability on dividend policy, analyze the effect of profitability on firm value, analyze the effect of dividend policy on firm value, and analyze dividend policy as a mediator of the relationship between profitability and firm value. The population in this study was 10 companies; the sampling technique used purposive sampling so that a sample of 9 companies was obtained during the period 2016 to 2021. The analysis technique used simple regression analysis, and multiple regression analysis. The results analysis shows that profitability has an effect on dividend policy. Profitability has an effect on firm value. Dividend policy has an effect on firm value and Policy as a mediator of the relationship between profitability and firm value.*

**Keywords:** Dividend Policy, Profitability, Firm Value.

## 1. INTRODUCTION

The value of the company reflects investors' views on the level of success of the company which is often associated with stock prices, so that if the stock price is high, then the value of the company can be high. Companies that succeed in realizing the goals can be seen from the results of company profits, company performance, company investment and company value. Companies that have good market value are based on companies that have good performance.

The reason for choosing pharmaceutical companies as research objects is because pharmaceutical companies are a strategic industry and aim to realize national resilience, especially during the COVID-19 pandemic. Therefore, pharmaceutical companies are one of the right choices for investors in investing their funds by taking into account the risks that are not too big. to make a profit. This is supported by the rapid development of the times, the business of medical equipment, drugs, and hospitals has grown rapidly. In addition, pharmaceutical companies also support the Indonesian economy, due to increased purchasing power, increased public awareness of health and lifestyle, which form a strong basis for developing pharmaceutical companies in Indonesia. Therefore, The pharmaceutical industry can play a very big role in helping the government realize public health through the provision of needed medicines by providing health care facilities. Along with changes in the lifestyle of modern society, the pattern of disease also changes.

The stock price will be higher if the growth is high and the discount rate is low. Owners of common stock have a claim to profits, and earnings per share is the owner's return on his investment. When an investor buys a stock, the investor buys a proportionate share of the entire future income stream. According to Welsch et al. (2017), through the approval of the board of directors, cash dividends are usually distributed to shareholders. This may also include dividends in the form of shares or other forms of payment. The response of stock prices to the announcement of unexpected dividend changes is related to the preference of marginal investors in companies where other things are considered unchanged. In addition, a company that changes its dividend policy is expected to experience an upward or downward trend in its stock returns.

Febriana et al (2016) stated that the stock value will increase due to the policy of adding dividends and the stock value will be below the market value by a lower dividend policy. In addition, it is also shown that there are two studies on the effect of dividends on stock prices, one that dividends do not affect market prices and the other is that dividend policy has a profound effect on the company's position in the stock market. The results of research by Senata (2016) and Ovami and Nasution (2020) prove that dividend policy has an effect on firm value. This is different from the results of Anita and Yulianto's (2016) research which found that dividend policy has no effect on firm value.

Profitability is a ratio to assess the company's ability to seek profit and affect the value of the company. This profitability also provides a measure of the level of management effectiveness of a company (Kasmir, 2016). Profitability ratios are highly

considered by potential investors and shareholders because they are related to stock prices and dividends to be received. One of the tools to see the profitability of a company is the Return On Assets (ROA) which is a measure of the company's overall ability to generate profits with the total assets available in the company. ROA is used to see the company's overall operational efficiency level. The higher this risk, the better the company. Research conducted by Nur (2018) and Madyoningrum (2019) proves that profitability has an effect on dividend policy.

High profitability will attract investors to invest their funds for the company's business expansion, on the other hand, investors are reluctant to invest or even withdraw their funds if profitability is low. Meanwhile, for companies, the effectiveness of their business management can use profitability as an evaluation tool. This is as revealed by Suwardika and Mustanda (2017) that higher profitability is a good sign for investors to acquire company shares and increase company value. If investors realize the desire to own shares into a demand for company shares, it is possible that demand will increase. This constant high demand also reflects that investors value companies in the market higher than the value of companies listed in their financial statements. Rudangga and Sudiarta (2016) prove that profitability has an effect on firm value. However, it is different from the results of Thaib and Dewantoro's research (2017) which states that profitability has no effect on firm value.

## **2. LITERATURE REVIEW**

### **2.1. Corporate Value Concept**

Hermuningsih (2012) states that firm value is the investor's perception of the company that is linked to the market price. The market price is the observed share price in the financial market. The market price of a company incorporates the information available to investors. If the market price reflects all relevant information, then the observed price is also the intrinsic price, or fundamental price. Firm value is always associated with financial decisions. Company value according to Hery (2017: 5) is "a certain condition that has been achieved by a company as an illustration of public trust in the company after going through a process of activity for several years, starting from the establishment of the company until now." Senata (2016) shows that dividends are positively related to firm value. Dividends provide information about the dominant profitability in financing decisions.

### **2.2. Profitability Concept**

Profitability is the company's ability to earn profits based on the assets owned. Profit is business income generated after paying all costs directly related to revenue, such as producing products, and other costs related to carrying out business activities. Husnan and Pudjiastuti (2015) states that certain aspects such as assets and working capital enable companies to generate profits. Kasmir (2016: 196) defines profitability, which is a ratio to assess the company's ability to seek profit. Profitability ratios also provide a measure of the effectiveness of a company's management. This is indicated by the profits generated from sales and investment income. In essence, the use of profitability ratios shows the efficiency of the company.

### **2.3. Dividend Concept**

Dividends according to Hidayat (2011: 75) are "the value of the company's net income after tax minus retained earnings which are held as company reserves. The dividends obtained can be in the form of cash or in the form of shares. For investors, dividends serve as a popular source of investment income. For the issuing company, it is a way to redistribute profits to shareholders as a way to thank shareholders for support and to encourage additional investment. Dividends also serve as an announcement of the company's success. Because dividends are issued from the company's retained earnings, only substantially profitable companies issue dividends of any consistency.

### **2.4. Dividend Policy**

Dividend policy according to Hery (2017:178) is "a company funding decision to determine how much company profits will be distributed to shareholders and will be reinvested or retained in the company." Dividend policy according to Martono and Harjito (2014) is a decision whether the profits earned by the company will be distributed to shareholders as dividends or will be retained in the form of retained earnings to finance investment in the future. The financial manager's goal for a company's dividend policy is to maximize owner's wealth while providing adequate financing for the company.

### **2.5. Hypothesis**

H1: Profitability has an effect on dividend policy.

H2: Profitability has an effect on firm value.

H3 : Dividend policy has an effect on firm value.

H4 : Profitability affects firm value through dividend policy.

### 3. RESEARCH METHODS

#### 3.1. Research design

Based on the research objectives, the type of research used is hypothesis testing research (Sekaran and Bougie, 2017). This type of research is a causal study, namely research conducted with the intention of providing an explanation of cause and effect or the relationship between variables through hypothesis testing. Information from the research results to be obtained is regarding the significance of the relationship between variables built on an equation model based on relevant concepts (Cooper and Schindler, 2014).

#### 3.2. Research variable

##### 1) Variable Classification

The variables in this study consisted of:

- a. Independent variable : profitability (X)
- b. Intervening variable: dividend policy (Y1)
- c. Dependent variable : firm value (Y2)

##### 2) Conceptual Definition of Variable

###### a. Profitability

Profitability according to Kasmir (2016: 196) is a ratio to assess the company's ability to seek profit.

###### b. Dividend Policy

Dividend policy according to Martono and Harjito (2014) is a decision whether the profits earned by the company will be distributed to shareholders as dividends or will be retained in the form of retained earnings to finance investment in the future.

###### c. The value of the company

Company value by Hery (2017: 5) is "a certain condition that has been achieved by a company as an illustration of public trust in the company after going through a process of activity for several years, starting from the establishment of the company until now.

##### 3) Variable Operational Definition

###### a. Profitability

Profitability is a measure in percentage to measure the extent to which the company's ability to utilize its resources to generate profits from its operations.

The formula is:

$$ROA = \frac{\text{Earning After Tax}}{\text{Total Asset}}$$

###### b. Dividend Policy

Dividend policy is a company's decision to determine how much dividends are paid in percentage to shareholders.

The formula is:

$$DPR = \frac{DPS}{EPS}$$

Information:

DPR = Dividend Payout Ratio

DPS = Dividend Per Share

EPS = Earnings Per Share

###### c. The value of the company

The value of the company is the value or market price that applies to the company's general shares.

The formula:

$$\text{Tobin's Q} = \frac{\text{MVE} + \text{DEBT}}{\text{TA}}$$

Information:

MVE = Market Value of Equity

TA = Total Assets

DEBT = (Current Liabilities – Current Assets) + Inventories + Non-Current Liabilities.

#### 3.3. Population and Sampling Techniques

The selected population are pharmaceutical companies listed on the Indonesia Stock Exchange as many as 10 companies. Companies that are used as samples are sought by purposive sampling, namely sampling in accordance with the research objectives or problems developed based on certain criteria. Companies that are sampled must meet the criteria, namely

pharmaceutical companies that publish annual financial reports continuously for six consecutive years, namely 2016, 2017, 2018, 2019, 2020 and 2021. Based on these criteria, the number of samples in this study was obtained as much as 9 companies, with details as follows:

**Table 1. Population and Research Sample**

No	Company name	2016	2017	2018	2019	2020	2021	Information
1	Darya Varia Laboratoria Tbk	✓	✓	✓	✓	✓	✓	Complete
2	Indofarma (Persero) Tbk	✓	✓	✓	✓	✓	✓	Complete
3	Kimia Farma (Persero) Tbk	✓	✓	✓	✓	✓	✓	Complete
4	Kalbe Farma Tbk	✓	✓	✓	✓	✓	✓	Complete
5	Merck Indonesia Tbk	✓	✓	✓	✓	✓	✓	Complete
6	Phapros Tbk., PT	✓	✓	✓	✓	✓	✓	Complete
7	Pyridam Farma Tbk	✓	✓	✓	✓	✓	✓	Complete
8	Merck Sharp Dohme Pharma Tbk (dh Schering Plow Indonesia Tbk)	-	-	✓	✓	✓	✓	Incomplete
9	Sido Muncul Herbal & Pharmaceutical Industry Tbk	✓	✓	✓	✓	✓	✓	Complete
10	Tempo Scan Pacific Tbk	✓	✓	✓	✓	✓	✓	Complete

Source: Indonesia Stock Exchange processed, 2022.

### 3.4. Data analysis technique

The process of analyzing is descriptive analysis, testing classical assumptions, simple regression analysis and multiple regression analysis.

## 4. RESEARCH RESULTS AND DISCUSSION

### 4.1. Descriptive statistics

Descriptive analysis was carried out with the aim of describing research data and explaining research variables regarding the minimum and maximum values, average (mean), and standard deviations of Profitability, Dividend Policy and Company Value during the period 2016 to 2021 as presented in Table 2.

**Table 2. Descriptive Statistics of Variables**

	Minimum	Maximum	mean	Std. Deviation
Profitability	-3.03	30.99	8.3620	7,37947
Dividend Policy	-181.66	560.86	28,7702	87.06906
The value of the company	1.22	21.41	4.5678	4.19191

Source: SPSS Report, 2022.

### 4.2. Classic Assumption Test Results

The assumption that the data is normally distributed is one of the important assumptions when conducting a regression study. Based on the results of the normality test, it shows that the data (dots) are distributed close to the horizontal line. This indicates that the research data, including the variables of profitability, dividend policy and firm value, are normally distributed.

By using the ANOVA table on SPSS, the value of Sig. linearity is used to show the extent to which the independent variables are directly proportional to the straight line. If the value of Sig. linearity is smaller than the significance level ( $\alpha = 0.05$ ), then linear regression can be used to explain the relationship between variables in the model. The results of the linearity test are presented in the following table.

**Table 3. Linearity Test Results**

Variable	F	Sig.	Information
Dividend Policy*Profitability	71,812	0.014	Linear
Company Value*Profitability	37,853	0.025	Linear
Company Value*Dividend Policy	116.064	0.000	Linear

Source: SPSS output processed, 2022.

**4.3. Hypothesis Test**

The results of the analysis for hypothesis testing are presented in table 3 below.

**Table 4. Hypothesis Testing**

Independent Variable	Intervening Variables	Dependent variable	Direct Influence	Prob	Indirect Influence	Total Influence	Information
Profitability	-	Dividend Policy	5,820	0.000*	-	-	Significant
Profitability	-	The value of the company	0.179	0.008*	-	-	Significant
Dividend Policy	-	The value of the company	0.024	0.000*	-	-	Significant
Profitability	Dividend Policy	The value of the company	0.179	-	0.140	0.319	Mediation

\* significant on  $\alpha 5\%$ .

Source: Data processed, 2022.

Based on the data in Table 3 is the result of testing the direct and indirect effects of this study. Hypothesis 1 states that profitability has an effect on dividend policy. The results of the analysis obtained a p-value of 0.000 which means less than a significance value of 0.05. Thus, statistically the first hypothesis is accepted. The regression coefficient value is 5.820, a positive sign on this value indicates that profitability has a positive effect on dividend policy.

The effect of profitability on firm value shows that the p-value of 0.008 is less than 0.05. Thus, it can be concluded statistically that profitability has an effect on firm value, so the second hypothesis is accepted. The regression coefficient value is 0.179, a positive sign on this value indicates that profitability has a positive effect on firm value.

The effect of dividend policy on firm value shows that the p-value of 0.000 is less than 0.05. Thus, it can be concluded statistically that dividend policy has an effect on firm value, so the third hypothesis is accepted. The regression coefficient value is 0.024, a positive sign on this value indicates that dividend policy has a positive effect on firm value.

In testing the dividend policy as a mediation, it shows that there is an effect of profitability on firm value through dividend policy. This is evidenced by the value of the total effect is greater (0.319) than the indirect effect (0.179). This means that the fourth hypothesis is accepted.

**4.4. Discussion**

**4.4.1. The Effect of Profitability on Dividend Policy**

Profitability affects dividend policy, which means that companies with high profitability tend to pay dividends more often pay high dividends to shareholders. A high level of profitability allows companies to pay dividends easily so that the direct relationship between profitability and the level of dividend payments is one-way.

High profitability is considered to increase the company's income so as to encourage high dividend payments to shareholders. On the other hand, low profitability will reduce the company's liquidity, forcing the company to pay low dividends or even almost no dividends at all. As opinion Husnan and Pudjiastuti (2015) which states that certain aspects such as assets and working capital for the company generate profits. Dividend policy must seek a balance between short-term cash flow and future profit growth of the company. The expectation of the company's profitability is that it should have an impact on the company's dividend policy where it should be. The results of this study support research that has been done by Nur (2018) and Madyoningrum (2019) proves that profitability affects dividend policy.

**4.4.2. The Effect of Profitability on Firm Value**

Profitability has been tested in this study significantly affects firm value. Profitability provides a broad indication that a company has the ability to increase the company's income level. The greater the company's profitability, the more profits are distributed to shareholders, so the company's value is expected to be higher. The profitability of pharmaceutical companies in the period 2016 to 2021 shows favorable results, so that investors respond well to the profitability of the sample companies. Signals in the form of good news given by the company to investors in the form of information on company profits that continue to increase will increase the positive response of investors in receiving signals in the form of good news from the company. As opinion Kasmir (2016: 196) which states that profitability is a ratio to assess the company's ability to seek profit. Profitability ratios also provide a measure of the effectiveness of a company's management. This is indicated by the profits generated from sales and investment income. In essence, the use of profitability ratios shows the efficiency of the company.

High profitability will attract investors to invest money for the company's business expansion, on the contrary, investors are reluctant to invest or even withdraw their funds if profitability is low. Meanwhile, for companies, the effectiveness of their

business management can use profitability as an evaluation tool. Higher profitability gives a good sign to investors so that it can increase the value of the company. If investors realize the desire to own shares into a demand for company shares, it is possible that demand will increase. An increase in demand on the one hand and a stagnant supply of shares on the other hand will increase stock prices. The results of this study support Rudangga and Sudiarta (2016) who prove that profitability affects firm value. However, the results of the study do not support Thaib and Dewantoro (2017) who found that profitability does not affect firm value.

#### **4.4.3. The Effect of Dividend Policy on Firm Value**

Dividend policy affects firm value, which means that investors prefer dividends to capital gains, so it can be interpreted that the large company dividend distribution will certainly foster a positive sentiment for investors to invest, the more investment, the more company value can increase and cause stock prices to be expensive. These results support the signaling theory, that dividend payments are used as a signal to describe the company's current and future prospects. If the rate of return and the amount of dividends distributed is high, it will give a positive signal to investors, so that investors will be interested in buying the company's shares and the demand for company shares will increase and increase the share price. The stock price is a reflection of the value of the company as measured by Tobin's Q, thus the increase in the stock price will certainly increase the value of the company. The results of this study are in accordance with the opinion of Hery (2017: 91), which states that companies with high dividend payout rates will attract investors to invest their capital in the company. With the large number of investors who invest capital by buying company shares, it will affect the increase in the company's share price so that it will increase the value of the company. The results of this study support Senata (2016) and Ovami and Nasution (2020) who prove that dividend policy affects firm value. However, the results of this study do not support the research conducted by Anita and Yulianto (2016) which found that dividend policy does not affect firm value.

#### **4.4.4. The Effect of Profitability on Firm Value Through Dividend Policy**

Dividend policy as a mediator of the relationship between profitability and firm value. This shows that profitability can increase the value of the company, if the company distributes dividends to shareholders. The value of the company has a positive sentiment on the achievement of profits due to dividend payments, so the stock price will increase because the company shows a positive signal to pay dividends. Investors believe that companies with high profitability have a great opportunity to pay dividends and have the opportunity to finance their investment projects internally. Consequently, investors are increasingly interested in buying company shares so that the share price increases so that the value of the company will also increase. The greater the profitability, the company implies that more profits are distributed to shareholders, increasing the share price and in turn making the value of the company higher. This is in accordance with the opinion of Hermuningsih (2012) which states that the value of the company is the investor's perception of the company that is linked to the market price.

Profitability in providing significant predictive information for high-profit pharmaceutical companies should be finance dividends as a means to send signals from internal sources, namely retained earnings, fund reserves, and accumulated funds and others because financing from internal sources is more secure and more economical than the cost of capital from external sources. Stable dividends paid to investors indicate high profitability and prosperity of the company. The regularity of dividend payments will strengthen the company's position in the market and increase its share price, thereby increasing the value of the company.

If the profits of pharmaceutical companies increase, the company will hold most of its profits as retained earnings and part of it to pay dividends to investors. Therefore, investors respond positively that some of the profits are distributed as dividends, profitability will increase the value of the company. It can also be said that dividend policy is a proactive decision to send a signal to investors that the company is healthy and profitable. Investors are very positive about companies that distribute dividends that are high enough to meet their current income needs. This attitude of investors is manifested in the high demand for shares so that it has an impact on increasing the value of the company.

## **5. CONCLUSIONS AND RECOMMENDATIONS**

### **5.1. Conclusion**

Based on the discussion in the previous chapter, it can be concluded as follows:

1. Profitability affects dividend policy, which means a high level of profitability allows companies to pay dividends easily and continuously. Companies that manage to record large profits will distribute large dividends to give a signal that the company is in good condition and is very appreciative to shareholders.
2. Profitability affects the value of the company, which means an increase in profitability gives a signal of a return from investment and has bright prospects for investing in pharmaceutical companies. Thus, investors are increasingly interested in buying company shares so that the share price increases and this can increase the value of the company.
3. The policy affects the value of the company, which means that if the company often distributes dividends, it will strengthen the company's position in the market and increase its share price and thus the value of the company will also increase.

4. Dividend policy as a mediator of the relationship between profitability and firm value, which means that firm value will increase if profitability increases, but the increase in firm value will only increase if the company distributes dividends to shareholders.

## **5.2. Suggestion**

In connection with the conclusions, the researchers can provide suggestions include:

1. Pharmaceutical companies should optimize the value of the company by considering profitability and dividend policy. High profitability is achieved by operating excellence as an effort by managers in managing capital or company assets. The dividend payment policy is better continuously implemented by determining it properly and correctly.
2. The findings of this research can be used as a reference for researcher further, and further researchers can improve this research by examining companies from sectors other than pharmaceuticals. Tobin's Q proved to be very good as a proxy for company value because it provides more information about the state of the company. If this research is to be developed, it is advisable to add several aspects that can affect the value of the company as proxied by Tobin's Q such as growth rate, asset structure, and liquidity.

## **REFERENCES**

- Anita, Aprilia and Arief Yulianto. 2016. The Effect of Managerial Ownership and Dividend Policy on Firm Value. *Management Analysis Journal*. Vol. 15, No. 1: 17-24.
- Cooper, Donald R. And Pamela S. Schiendler. 2014. *Business Research Methods*. 12th edition. New York: The McGraw-Hill/Irwin series.
- Febriana, Elia, Djumahir and Achmad Helmy Djawahir. 2016. The Effect of Capital Structure, Dividend Policy, Company Size, Managerial Share Ownership and Profitability on Firm Value (Study on Manufacturing Companies Listed on the IDX in 2011-2013). *Journal of Business Economics*. Vol. 21 No. 2: 163-178.
- Hermuningsih, Sri. 2012. Effect of Profitability, Size on Firm Value with Capital Structure as Intervening Variable. *Journal of Business Strategy*, Vol. 16(2): 232-242.
- Harry. 2017. *Financial Statement Analysis (Integrated and Comprehensive edition)*. Jakarta : Grasindo
- Hidayat, Taufik. 2011. *Sharia Investment Smart Book*. Jakarta: Mediakita.
- Husnan, Suad and Enny Pudjiastuti. 2015. *Fundamentals of Financial Management*. Seventh Edition. Yogyakarta: UPP STIM YKPN.
- Kasmir, 2016. *Analysis of Financial Statements*. Jakarta: PT Raja Grafindo Persada.
- Madyoningrum, Asri Winanti. 2019. The Effect of Firm Size, Leverage and Profitability on Dividend Policy. *Journal of Business and Management Merdeka University Malang*. Vol 6 No 1: 45-55.
- Martono SU and Agus Harjito. 2014. *Financial Management*. Fourth printing. 2nd Edition. Yogyakarta: Ekonisia.
- Nur, Triasesiarta. 2018. The Effect of Profitability and Liquidity on Dividend Policy With Firm Size as Moderating (In Manufacturing Companies Listed On the Indonesia Stock Exchange 2013-2017 Period). *Essence.*, Vol. 21 No. 2:1-15.
- Ovami, Debby Chyntia and Ananda Anugrah Nasution. 2020. The Effect of Dividend Policy on the Value of Companies Listed in the LQ 45 Index. *Owner: Research and Accounting Journals*. Vol. 4 No 2: 331-336
- Rudangga, I. Gusti Ngurah Gede, and Gede Merta Sudiarta. 2016. The Effect of Firm Size, Leverage, And Profitability on Firm Value. *E-Journal of Unud Management*, Vol. 5, No.7: 4394 – 4422.
- Now, Uma and Roger Bougie. 2017. *Research Methods for Business: A Skills-Development Approach*. Edition 6, Book 2, Salemba Empat, South Jakarta.
- Senate, Maggee. "The effect of dividend policy on the value of companies listed on the LQ-45 index of the Indonesia Stock Exchange." *Journal of Microskilled Economics Wira: JWEM* 6.1 (2016): 73-84.
- Suardika, I Nyoman Agus and I Ketut Mustanda. 2017. The Effect of Leverage, Company Size, Company Growth, and Profitability on Company Value in Property Companies. *E-Journal of Unud Management*, Vol. 6, No. 3: 1248-1277.
- Thaib, Ilham, and Acong Dewantoro. 2017. The effect of profitability and liquidity on firm value with capital structure as an intervening variable." *Journal of Banking Management and Accounting Research*. 1.1: 25-44.
- Welsch, G. A., Hilton, R. W., and Gordon, P. N. 2017. *Budget Planning and Control*, translators Purwatiningsih and Moudy Marouw, Book Two, Jakarta: Salemba Empat.