Profitability Drives Dividend Policy and Firm Value in the Digital Era

Supardi(✉), Sriyono, and Sigit Hermawan

Faculty of Business, Law and Social Sciences Muhammadiyah Sidoarjo University, Sidoarjo, Indonesia
supardi@umsida.ac.id

Abstract. This study aimed to investigate the impact of profitability, firm size, and leverage on firm value through dividend policy in the digital era, where companies strive to increase profits and expand their global market presence. The research used a descriptive and verification method, with data collected through secondary sources and a purposive sampling method for a period of five years. Multiple regression analysis using SPSS version 20.0 was employed to analyze the data. The findings indicate that profitability, firm size, and leverage have a significant influence on dividend policy and firm value, with dividend policy mediating the effect of profitability and leverage on firm value. However, dividend policy did not mediate the effect of firm size on firm value. These results suggest that companies should focus on profitability and adopt a consistent dividend policy to increase their value, while investors can use these factors to make informed decisions about investing in a company.

Keywords: Company Size · Leverage · Profitability · Company Value · Dividend Policy

1 Introduction

Stock prices are often associated with company value, meaning that if the stock price is high, the company value can rise. Firm value reflects investors' perception of the company's success. The results of company earnings, company investment, company value, and company performance can be used to identify a business that is successful in achieving its goals. Strong market values can reveal a company that is operating well. All private companies now have the option to become public companies by issuing and selling part of their shares to the public due to the growing development of the business sector, especially businesses that go public. In order for business actors in the field of business to become more competitive and tight it can lead to increased competition. Service providers, especially manufacturers, can increase the share price of manufacturers and company value in response to the intensity of public demand. By increasing the value of the company, investors can be more interested in buying shares by describing the company's condition in good condition. Businesses usually aim to get maximum profit. Maximum shareholder profits can be seen from the value of the

T. T. Y. Alabdullah et al. (Eds.): ICIGR 2022, ASSEHR 750, pp. 532–541, 2023.
https://doi.org/10.2991/978-2-38476-052-7_58

company and increasing stock price. The main objective of financial decisions is to maximize business value or shareholder wealth [1].

Stock prices are often associated with company value, meaning that if the stock price rises, it can increase the company value. The main consideration for investors is that if the company's value increases, it means that the company's condition is healthy. Company profit results, company investment, company value, and company performance can be used to identify businesses that are successful in achieving their goals. Strong market values can reveal a company that is operating well. All private companies now have the option to become public companies by issuing and selling part of their shares to the public in line with the development of the business world, especially businesses that go public. So that business actors in the field of business are more competitive and tighter, this can lead to increased competition. Service providers, particularly producers, can increase producer share prices and firm value in response to the intensity of public demand. By increasing the value of the company, investors can be more interested in buying shares by describing the condition of the company in good condition. Businesses usually aim to get the maximum profit. Maximum shareholder profits can be seen from the company's value and increased share prices. The company's decision is to increase the value of the company or increase shareholders [1].

Many businesses are able to grow and develop because of the extraordinary growth in the manufacturing sector. Here, a business that can survive and thrive can increase its competitive advantage in the industrial sector. To determine the number of employees and work-life balance based on labor performance factors and time efficiency factors in the production process, companies must have good operations management. The results of this research can be used by investors in assessing and managing the company in order to increase its value of the company. In principle, the company has short term and long term goals. Utilizing the company's resources, the company's short-term goal is to maximize profits.

When a company's value increases, it can inspire confidence in its ability to produce high-quality products among investors and the general public. Consequently, shareholder wealth and wealth will also increase. Growth in stock prices is a reflection of money (financing), asset management, and investment choices. The business owner's goal is that a high value will be followed by an increase in the share price of investors because a high company value will increase the welfare of the company's shareholders. The company is said to be healthy if the profit is higher than the cost of invested capital. Companies in managing resources to be able to increase efficiency and effectiveness in order to increase the value of the company [2].

The company's goal is to maximize the value of the company, to be represented at market prices, and to improve the welfare of shareholders. It also aims to grow the wealth of company owners by achieving the maximum profit or profit. Controlling the financial management function is one way to achieve company value which is also the company's goal. When financial decisions are made, they impact other financial decisions and the value of the company, which in turn increases the shareholder's share of wealth. In general, investors invest their money in companies primarily to generate dividend income. Every business must be able to function with a reasonable level of

efficiency in these circumstances to maintain its competitiveness and superiority and generate optimal net profit. [3].

The higher the value of the company, the better the company is in the eyes of society, because stock prices and company value are interrelated. If the stock price rises, it shows the value of the company will be higher. Conversely, the value of the company decreases when the stock price increases. According to various studies, profitability, company size, and dividend policy can increase company value. The component of firm size can have an impact on firm value in addition to the dividend policy factor.

Investors often use profitability as a measure of a company's value. Profitability is a special attraction for investors because it is the result of managing the money invested by investors and can also reflect the distribution of profits to which they are entitled, namely the amount of money reinvested and the amount retained as dividends to investors. Companies can indirectly attract investors to be willing to invest their shares, so they must be able to increase the value of the company. As the results of the study stated, the higher the profitability given to investors to acquire company shares and increase the value of the company [4]. The results of the study can prove that profitability affects firm value [5]. However, in contrast to other research findings, it states that profitability does not affect firm value [6].

The value of the shares will increase due to the addition of dividends and the value of the shares will fall below the market price. According to two researchers, regarding the effect of dividends on stock prices, one stated that dividends did not affect market prices and the other stated that dividend policy greatly affected company shares in the market. The results of other studies state that there is an effect of dividend policy on firm value [7]. There is a difference with the results of research which found that dividend policy has no impact on firm value [8].

2 Methodology

This type of research is explanatory research, namely research aimed at explaining the effect of two or more independent variables on the dependent variable through statistical tests. The population in this study were all pharmaceutical companies listed on the IDX, totaling 12 companies, the sampling technique used was purposive sampling, with the criteria for 3 consecutive years presenting financial reports. Based on these criteria, a sample of 9 pharmaceutical companies was obtained. Data analysis techniques in this study used descriptive analysis and path analysis.

3 Results and Discussion

3.1 Results

Descriptive analysis is used to describe research data and explain research variables related to minimum, maximum, average and standard deviation Profitability, Firm Size, Leverage, Dividend Policy and Firm Value during the period 2017 to 2021 as shown in Table 1.

Table 1. Descriptive Statistics of Each Variable for 2017 – 2021

	Minimum	Maximum	Means	std. Deviation
Profitability	-3.03	30.99	8.51	7,43
Firm Size	25.80	30.88	28,66	1.34
leverage	0.04	79,27	38,77	20,72
Dividend Policy	0.00	560.86	34,68	19,19
Firm Value	1.22	21,41	4,42	4,34

Source: SPSS Report, 2022

In Table 1 it can be explained that profitability as measured by ROA ranges from -3.03 to 30.99 with a mean of 8.351. The minimum value of profitability is -3.03 indicating that the lowest value of profitability from all observations experienced a loss of only -3.03% and the maximum value was 30.99%, meaning that from all observations the highest value of profitability received a profit of 30.99%. The overall average profitability is 8.51% which indicates that the ability of pharmaceutical companies to generate profits is an average of 8.51% of their capital. This means that the company is quite good at generating profits. The standard deviation value is equal to7,43shows that the sample ROA data is quite varied or more or less the same because the standard deviation value is less than the mean value.

Firm size has a minimum value of 25.80 and a maximum value of 30.88 with a mean of 28.66, meaning that the average size of pharmaceutical companies during the observation period of pharmaceutical companies varies. The firm size standard deviation value of 1.34 shows that the sample firm size data in this research has a very varied distribution because the standard deviation value is smaller than the mean value.

Leverage has a minimum value of 0.04% and a maximum value of 79.27% with a mean of 38.77 meaning that the average pharmaceutical company during the observation period of pharmaceutical companies has varying leverage. The leverage standard deviation value of 20.72 shows that the sample leverage data in this research has a very varied distribution because the standard deviation value is smaller than the mean value.

The dividend policy in this research is proxied by the overall Dividend Payout Ratio (DPR) which has a minimum figure of 0% and a maximum figure of 560.86% with a mean of 34.58. The minimum value of 0% shows that during the observation period there are companies that do not pay dividends because the company suffers losses. The maximum value of 560.86% means that there are companies that pay dividends of 560.86% of profits. Meanwhile, the DPR's mean value was 34.68%, meaning that the average pharmaceutical company during the observation period paid dividends of 34.68% of net profit. The DPR standard deviation value of 19.19 shows that the sample DPR data in this research has a very variable distribution due to the standard deviation value exceeding the mean value.

The firm value in this research is proxied by Tobin's Q valuethe lowest value is 1.22 and the highest value is 21.41 with a mean of 4.42. This shows that during the research period pharmaceutical companies are valued by the market higher than the company's

Table 2. Hypothesis test

Independent Variable	Intervening Variables	dependent variable	Direct Influence	*p-value*	Indirect Influence	Total Impact	Information
Profitability	Dividend Policy	-	0.675	0.000*	-	-	Significant
Firm Size	Dividend Policy	-	-0.022	0.869	-	-	Not significant
leverage	Dividend Policy	-	0.184	0.288	-	-	Not significant
Profitability	-	The value of the company	0.355	0.024*	-	-	Significant
Firm Size	-	The value of the company	0.099	0.319	-	-	Not significant
leverage	-	The value of the company	0.041	0.753	-	-	Not significant
Dividend Policy	-	The value of the company	0.537	0.000*	-	-	Significant
Profitability	Dividend Policy	The value of the company	0.355	-	0.362	0.717	Mediation
Firm Size	Dividend Policy	The value of the company	0.099	-	-0.012	0.087	Not Mediation
leverage	Dividend Policy	The value of the company	0.041	-	0.099	0.140	Mediation

* significant onα5%.
Source: Data processed, 2022

book value which is listed or in other words the mean pharmaceutical company shares are more expensive than the replacement cost of company assets, which implies that these shares are highly appreciated. The standard deviation Tobin's Q value of 4.34 indicates that the sample DPR data in this research has a minimal distribution of variation because the standard deviation value is below the mean value.

To test the hypothesis using path analysis, the results of path analysis are presented in Table 2.

Based on Table 2, it shows the findings of testing the direct and indirect effects of this research. The value of the profitability regression coefficient on dividend policy is 0.675 and the p-value is 0.000 which is less than 0.05, which means that profitability has

a positive and significant effect on dividend policy. The regression coefficient value of firm size on dividend policy is -0.022 and the p-value is 0.869 greater than 0.05, which means that firm size has a negative but not significant effect on dividend policy. The regression coefficient value of leverage on dividend policy is 0.184 and the p-value is 0.288 greater than 0.05, which means that leverage has a negative but not significant effect on dividend policy.

The value of the profitability regression coefficient on firm value is 0.355 and the p-value is 0.024 which is less than 0.05, which means that profitability has a positive and significant effect on firm value. The regression coefficient value of firm size on firm value is 0.099 and the p-value is 0.319 greater than 0.05, which means that firm size has a negative but not significant effect on firm value. The regression coefficient value of leverage on firm value is 0.041 and the p-value is 0.753 greater than 0.05, which means that leverage has a negative but not significant effect on firm value. The regression coefficient value of the dividend policy on firm value is 0.537 and the p-value is 0.000 which is less than 0.05,

In testing the dividend policy as a mediation, it shows that there is a profitability effect on firm value through dividend policy. This is proven by the value of the indirect effect (0.362) which is greater than the direct effect (0.355). Dividend policy fails as a mediation effect of firm size on firm value, indicated by the value of the indirect effect (-0.012) which is smaller than the direct effect (0.099). There is a leverage effect on firm value through dividend policy, this is evidenced by the value of the indirect effect (0.099) is greater than the direct effect (0.041).

3.2 Discussion

Profitability affects dividend policy, which means that high profitability tends to be more frequentpay large dividends to shareholders. Heightthe level of profitability allows companies to pay dividends easily so that the direct relationship between profitability and the level of dividend payments goes one way. High profitability is considered to be able to increase company income thereby encouraging large dividend payments to all shareholders. On the other hand, low profitability will reduce company liquidity, forcing companies to pay low dividends or even almost no dividends at all. The findings of this research support previous research Sudiartana et al.did and found that profitability affects dividend policy [9].

Firm size has no effect on dividend policy, this shows that the size of the company has no impact on increasing or decreasing dividend policy. Thus firm size is not a consideration for investors in investing their funds in the company. Compared to small companies, large companies are usually more concerned with dividends. Therefore, investors will be encouraged if the company can demonstrate high stability and profitability because larger and more established companies will be able to implement automatic dividend payments. The results of this study support Sudiartana et al. which states that firm size has no effect on dividend policy [9].

Leverage has no effect on dividend policy, the size of leverage does not always make dividend policy decrease even with leverage, companies can use it as a source of capital and assets that can be used as a company's business to get high profits so that with increasing profits, companies will consider paying dividends. This shows that

investors in investing in companies do not consider leverage. The expansion of the use of debt will initially increase the company's ability to generate profits for shareholders, because interest rates are still relatively cheap compared to the company's potential to generate profits. However, if the business continues to take on more and more debt, interest rates will rise as a result of the increased risks faced by creditors. The company's ability to generate profits for shareholders is also much smaller than in good economic conditions because the increase in sales in normal economic conditions is relatively smaller than in good economic conditions. When a company takes on more debt than it takes in comparison to the interest rate it pays, the company's ability to generate money decreases. The results of this study support Sudiartana et al. which states that leverage has no effect on dividend policy The company's ability to generate profits for shareholders is also much smaller than in good economic conditions because the increase in sales in normal economic conditions is relatively smaller than in good economic conditions. When a company takes on more debt than it takes in comparison to the interest rate it pays, the company's ability to generate money decreases. The results of this study support Sudiartana et al. which states that leverage has no effect on dividend policy The company's ability to generate profits for shareholders is also much smaller than in good economic conditions because the increase in sales in normal economic conditions is relatively smaller than in good economic conditions. When a company takes on more debt than it takes in comparison to the interest rate it pays, the company's ability to generate money decreases. The results of this study support Sudiartana et al. which states that leverage has no effect on dividend policy The results of this study support Sudiartana et al. which states that leverage has no effect on dividend policy The results of this study support Sudiartana et al. which states that leverage has no effect on dividend policy [9].

Profitability has been tested in this research to affect company value. Profitability gives a broad indication that a company is capable of increasing the company's income level. The higher the profitability of the company, the more profits are distributed to shareholders, the greater the desired company value. The profitability of pharmaceutical companies from 2017 to 2021 shows favorable results, so that investors respond well to the profitability of the sample companies. Signals in the form of good news that companies provide to investors through information on company profits that continue to increase will increase the positive response of investors to good signals from companies that investors will receive. Profitability ratios also provide a measure of effectiveness in managing the company. This shows the profit from sales as well as the return on investment. The use of profitability ratios basically shows the performance of a company. High profitability will attract investors to invest their money in developing the company's business, conversely when profitability is low, investors will be afraid to invest and will even withdraw capital from the company. Meanwhile for companies, the effectiveness of business management can use profits as an evaluation tool. The higher the profitability gives a good sign to investors so that it can increase the value of the company. If investors manifest their desire to own shares into requests 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 research findings support thisAmbarwati and Vitaningrum and who prove that profitability affects firm value [10].

The results of this study also support Suwardika and Mustanda who state that profitability affects firm value [4]. The results of this study also support Sutama and Lisa who state that profitability affects firm value [11].However, the research findings do not support Thaib and Dewantoro who found that profitability does not affect firm value [6].

Firm size has no effect on firm value, this shows that large or small company size will not be able to affect firm value. An investor, if he wants to assess a company, will not look at it in terms of company size which is reflected in the total assets owned by the company. However, investors will review more from various aspects such as paying attention to the company's performance as seen in the company's financial statements, the good name of the company, and dividend policy before deciding to invest their funds in the company.The results of this study do not support Suwardika and Mustanda who state that firm size has no effect on firm value[4].

Leverage has no effect on firm value, this shows that the level of leverage does not affect the increase or decrease in firm value. Thus investors in investing funds in companies do not consider leverage, but rather consider other factors. Increased demand for shares will cause the company's value to increase. Leverage for companies can be used to obtain higher profits by using capital originating from debt or assets financed by debt so that the company can run its business optimally so that the profits obtained by the company increase.The results of this study do not support Suwardika and Mustanda who state that leverage affects firm value [4].The results of this study also do not support Widayanti and Yadnya who state that leverage has no effect on firm value [12].

Dividend policy affects the value of the company, which means thatinvestors tend to prefer dividends compared to capital gains, so it is understandable that the distribution of corporate dividends can certainly encourage positive sentiment among investors in investing their funds, the large number of investments so that it can increase the value of the company and result in high stock prices.These results support the signaling theory, that dividend distribution is used as a signal to describe the company's current and future prospects. If high returns and dividends give a positive signal to investors, then the demand for company shares is high and investors are interested in purchasing company shares, so that the company's stock price increases. Stock prices reflect the value of the company which is measured through Tobin's Q, so an increase in stock prices can definitely increase the value of the company. The findings of this research are in line with the opinion of Hery (2017: 91) who argues that companies with high dividend payments, investors are interested in investing their money in these companies. Investors who are increasingly willing to increase capital by buying shares in companies, this will have an impact on the company's stock price to increase, in the end the company's value will increase. The results of this research supportOvami and Nasution who proved that dividend policy affects company value [7]. The findings of this research do not support research conducted by Anita and Yulianto which found that dividend policy does not affect firm value [8].

Profitability affects firm value through dividend policy. This indicates that profitability can increase the value of the company, if the company pays dividends to shareholders. The value of the company has a positive sentiment on achieving profits due to the distribution of dividends, so the share price increases because the company gives a positive signal to pay dividends. Investors believe that companies with high profitability have

a high chance of paying dividends and have the opportunity to fund their investment projects internally. Consequently, investors are increasingly interested in purchasing company shares so that the share price becomes higher and has an impact on increasing the value of the company.The high profitability of the company implies that more profit is paid to shareholders, increasing share prices and ultimately making the company's value higher.Profitability in providing significant predictive information for pharmaceutical companies that have high profits must finance dividends as a means of sending signals from internal sources, namely retained earnings, fund reserves, and accumulated funds etc. because financing from internal sources is more secure and more economical than the cost of capital from external. Stable dividends paid to investors indicate high profitability and prosperity of the company. The constancy 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 pharmaceutical company's profits increase, the company will retain most of its profits as retained earnings and partly to pay dividends to investors. Therefore investors respond positively to some of the profits distributed as dividends, profitability will increase the value of the company. Thus it is also said that the dividend policy is a proactive decision to send a signal of a healthy and profitable company condition to investors. Investors highly value companies that pay 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.

4 Conclusion

The analysis shows that profitability is a key factor affecting dividend policy, and companies with high profitability are more likely to distribute dividends to their shareholders. Dividend policy, in turn, has a significant impact on the firm's value, as paying frequent dividends can strengthen the company's position in the market and increase its share price, leading to an increase in the firm's overall value.

On the other hand, the size of the firm and the level of leverage have no direct impact on dividend policy or firm value. However, both factors indirectly affect firm value through dividend policy, as the company's size and leverage can influence its ability to pay dividends and signal its financial stability to investors.

The implication of these findings is that companies can improve their value by focusing on profitability and adopting a consistent dividend policy that reflects their financial performance. Investors, on the other hand, can use these factors as indicators to evaluate the potential of investing in a company, and to make informed decisions about buying or selling shares.

References

1. KY Dewi and H. Rahyuda, "The Influence of Profitability, Liquidity and Dividend Policy on Corporate Value of the Consumer Goods Industry Sector on the IDX," E-Jurnal Manaj. Univ. Udayana, vol. 9, no. 4, pp. 1252–1272, 2020, https://doi.org/10.24843/ejmunud.2020.v09.i04.p02.

2. MF Aldi, E. Erlina, and K. Amalia, “The Influence of Company Size, Leverage, Profitability and Liquidity on Company Value with Dividend Policy as a Moderating Variable in Consumer Goods Industry Companies Listed on the IDX for the 2007-2018 Period,"J. Science Socio Hum., vol. 4, no. 1, pp. 264–273, 2020, https://doi.org/10.22437/jssh.v4i1.9921.
3. Jufrizen and IN Al Fatin, “The Influence of Debt to Equity Ratio, Return on Equity, Return on Assets and Company Size on Firm Value in Pharmaceutical Companies,"J. Hum., vol. 4, no. 1, pp. 183–195, 2020, http://jurnal.abulyatama.ac.id/humaniora.
4. IN Suwardika and AK Mustanda, “The Influence of Leverage, Company Size, Company Growth, and Profitability on Company Value in Property Companies,"Manaj E-Journal. Unud, vol. 6, no. 3, pp. 1248–1277, 2017.
5. C. Faith, FN Sari, and N. Pujiati, “The Influence of Liquidity and Profitability on Firm Value,"J. Perspective., vol. 19, no. 2, pp. 191–198, 2021,https://doi.org/10.31294/jp.v19i2.11393.
6. I. Thaib and A. Dewantoro, “The Influence of Profitability and Liquidity on Firm Value with Capital Structure as Intervening Variables,"J. Ris. banking. Manaj. and Account., vol. 1, no. 1, pp. 24–44, 2017.
7. DC Ovami and AA Nasution, “The Effect of Dividend Policy on the Value of Companies Listed in the LQ 45 Index,"Own. (Research and J. Accounting), vol. 4, no. 2, pp. 331–336, 2020, https://doi.org/10.33395/owner.v4i2.247.
8. A. Anita and A. Yulianto, “The Influence of Managerial Ownership and Dividend Policy on Firm Value,"Manag. Anal. J., vol. 15, no. 1, pp. 17–24, 2016.
9. IGP Sudiartana and IGA Yudantara, “The Influence of Company Size, Liquidity, Profitability and Leverage on Dividend Policy,"JIMAT (Journal of Science. Student of Accounting) Univ. Educator. ganesha, vol. 11, no. 2, pp. 287–298, 2020.
10. J. Ambarwati and MR Vitaningrum, “The Influence of Liquidity and Profitability on Firm Value,"Compet. J. Account. and Finance., vol. 5, no. 2, pp. 127–130, 2021.
11. DR Sutama and E. Lisa, “EFFECT OF LEVERAGE AND PROFITABILITY ON COMPANY VALUE (Study of Food and Beverage Manufacturing Sector Companies listed on the Indonesia Stock Exchange),"Manaj Science. and Account., vol. X, no. 2, pp. 65–85, 2018.
12. LPPA Widayanti and IP Yadnya, “Leverage, Profitability, and Influential Managerial OwnershipAgainst Corporate Values in Real Estate and Property Companies,” E-Jurnal Manaj. Univ. Udayana, vol. 9, no. 2, pp. 737–757, 2020, https://doi.org/10.24843/ejmunud.2020.v09.i02.p17.