The Effect of Profitability, Leverage, and Company Size on Dividend Policy: A Case Study of Transportation Companies Listed on the Indonesia Stock Exchange for the 2017-2022 Period

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Abstract

The company's decision in determining the amount of dividends to be distributed to shareholders can be influenced by various factors, including profitability, leverage, and company size. This study aimed to analyze the effect of profitability, leverage, and company size on dividend policy in transportation companies listed on the Indonesia Stock Exchange (IDX) for the 2017-2022 period. In this study, Profitability is proxied by return on equity (ROE). Leverage is proxied by the debt to equity ratio (DER), and company size is proxied by the logarithm of total sales (Ln total sales). While the dividend policy is proxied using the dividend payout ratio (DPR) with the retention ratio formula by dividing retained earnings and net income balance, then 1 minus the RR value. The sampling technique in this study used a purposive sampling technique. There are 22 transportation companies listed on the Indonesia Stock Exchange for the period 2017 – 2022 which are used as samples in this study. The type of data used is quantitative data from secondary data sourced from financial reports. The data analysis method used is multiple linear regression analysis. The results of the study show that profitability, leverage, and company size simultaneously influence dividend policy. Partially profitability has a positive effect on dividend policy. Meanwhile, leverage has no negative effect on dividend policy, and company size has no positive effect on dividend policy.

1. Introduction

Dividends are an important aspect of a company's financial policy that can influence investors' perceptions of company performance and value. The company's decision in determining the amount of dividends to be distributed to shareholders can be influenced by various factors, including profitability, leverage, and company size. Profitability is a key indicator in assessing a company's financial performance. A high level of profitability can give companies the ability to distribute larger dividends to shareholders. Return on equity (ROE) is one of the most important financial ratios in analyzing a company's performance. ROE measures a company's efficiency in generating net profit after tax in relation to the capital invested by shareholders (equity). This is an important measure because it reflects how well a company can use its shareholder's capital to generate profits. When the ROE rate increases, it indicates that the company is able to generate greater profits in relation to its equity. This could be due to better operational efficiency, steady profit growth, or better asset management (Adipalguna, 2017; Affandi, 2018).

Leverage, on the other hand, reflects the level of debt a company has. Companies that have a high level of leverage may have limitations in distributing dividends because most of their profits must be used to pay interest and principal debt. The debt to equity
ratio (DER) reflects the level of dependence of the company on creditors. DER is a financial ratio that measures the extent to which a company finances its operations using debt compared to its own equity. This provides an illustration of the level of leverage or the company’s dependence on funds provided by external parties (creditors) compared to the capital provided by shareholders (equity). When the DER is higher, it indicates that the company has a greater degree of dependence on debt and, therefore, a higher level of financial risk (Agustino, 2019; Akbar 2020).

Company size can also affect dividend policy. Larger companies may have more resources and financial stability to pay larger dividends. However, smaller companies may be more aggressive in paying dividends to attract investors. Company size is an important dimension in company analysis and has many aspects that can be taken into account. Company size can be measured by the number of employees working in it. Companies with many employees tend to be considered large companies, while companies with fewer employees tend to be considered small companies. The company's annual revenue or sales is one of the most commonly used measures to assess the size of a company. Companies with high incomes tend to be considered large companies. The company's total assets include all assets owned, including property, equipment, investments, and others. This is a significant measure in assessing the size of the company because it reflects the amount of investment owned by the company. Total equity is the difference between total assets and total liabilities. It reflects the net economic value owned by the company's shareholders. Companies with large total equity tend to be considered large companies. The company’s market capacity refers to the total market value of its outstanding shares on the stock exchange. This is an important measure in the context of a public company that owns shares that are traded on the stock market. Company size has significant implications in various aspects, including access to financial resources, market competitiveness, and the impact on company policies, including dividend policy. Larger companies may have more access to capital and resources, as well as the ability to make larger investments. However, smaller companies may be more flexible and able to quickly adapt to market changes (Amalia, 2018; Andre, 2020; Dewi 2017). This study aimed to determine the effect of profitability, leverage, and company size on dividend policy in transportation companies listed on the Indonesia Stock Exchange (IDX) for the 2017-2022 period

2. Literature Review

Dividend policy

Dividend policy is the result of business activities carried out by management, which aims to seek profit through the effectiveness of the activities carried out as well as financing efficiency efforts. A dividend policy is a decision to distribute the company’s profits to its shareholders as dividends or to save the profits in the form of retained earnings to be used to finance future investments. So, if the dividends distributed to shareholders are higher, it will lead to lower retained earnings. However, if the company is more concerned with the growth of the company, the retained earnings will be higher, so the dividend distribution will be lower. This shows how the size of the dividends distributed has an impact on the quantity of profits retained and the company's internal funding sources as a whole. The dividend policy in this study is proxied by the dividend payout ratio (DPR), which is calculated using the retention ratio formula. The retention ratio is the ratio that shows the percentage of retained earnings compared to the company’s net profit. If the value retention ratio is a high company, indicating that the company allocates profits earned into retained earnings balances, the ratio of shareholder income is in the form of small dividends. Calculation dividend payout ratio (DPR) This is used to provide information to investors regarding the actual percentage of profits
earned by the company which are allocated for increasing or expanding operational activities and to be returned or distributed to shareholders, where the greater the percentage dividend payout ratio (DPR) set by a company, from an investor’s point of view it is more profitable because it gets a larger dividend distribution, while from the company’s point of view, there are fewer internal funding sources. This can affect the development of the company. Further explained, the optimal dividend policy is a policy that has a balance between current dividends and future growth that maximizes the company’s stock price (Gantino, 2017; Purwaningsih, 2019; Puspitaningtyas, 2019).

**Profitability**

The profitability ratio is a ratio that assesses the company’s ability to seek profits or profits in a certain period. It is this profit that the company earns as the basis for making policies to determine the amount of dividend payments to shareholders and the amount of profit that will be reinvested in the company as retained earnings. The higher the ability to earn profits, the greater the return expected by investors, thus making the company’s value better. It was further explained that a consistent level of profitability would be able to survive in its business by acquiring returns adequate for the risk. That way, the greater the company’s profits, the greater the company’s ability to pay dividends to shareholders. Profitability is very necessary for companies to decide to pay dividends, whereas, for long-term investors, it will be very important for them to see the benefits that will actually be received in the form of dividends. It was further explained that profitability also affects dividend policy because dividends are the net profit earned by the company, therefore dividends will be distributed if the company makes a profit. This study uses profitability ratios as measured through ROE (return on equity). ROE (return on equity) describes the company’s ability to generate net profit after tax by using its own capital. return on equity (ROE) has an important meaning to assess the company’s financial performance in meeting the expectations of shareholders. Where the higher the ROE ratio, the more efficiently the company uses its capital to generate net profit. Rather small return on equity (ROE) can indicate that the company is less efficient in managing its capital to earn profits so it has an impact on dividend payments to its shareholders. For company shareholders, return on equity (ROE) is very important because return on equity (ROE) is used as an important indicator to assess the company’s future prospects by looking at the extent to which the company’s profitability has grown. If the company is able to increase its profit, then every debt will result in an increased return on equity (ROE) that benefits shareholders, especially in the distribution of dividends (Ginting, 2018; Gunawan, 2020; Nurhayati 2020).

**Leverage**

Leverage is the ratio used to measure the extent to which a company’s assets are financed with debt. Further explained, it means the large amount of debt used by the company to finance its business activities when compared to using its own capital. The higher the leverage, the higher the risk faced by the company and the higher the expected rate of return. Further explained, if leverage High dividends will cause a decrease in the amount of dividends paid because the company prioritizes debt payments. The company should have a large debt that does not exceed its own capital if the use of debt that is too large in operational activities has an unfavorable impact on the company because the company has to pay obligations which will reduce the profits earned. It was further explained that the decrease in profits earned by the company would reduce the distribution of dividends to shareholders. In this research leverage with using proxies debt to equity ratio (DER). According to Amalia and Hermanto, the debt factor influences a company’s policy in paying dividends to shareholders. The company’s debt ratio in
the form of DER is used to pay debts. The debt to equity ratio is the comparison between total debt and equity, showing the part of one’s own capital that can reflect the company’s ability to fulfill its obligations as shown by some of the capital used to pay debts. DER is the ratio used to assess debt to equity. This ratio is sought by comparing total debt with total equity. The DER ratio describes the extent to which capital owners cover debts to outsiders, where the smaller this ratio, the better. Usually, investors prefer a value debt to equity ratio (DER) that is low because the security level of the funds is getting better (Hartanto, 2018; Himawan, 2020).

**Company size**

Company size is used to measure the size of a company which can be expressed by total assets or total net sales, where the greater the total assets and total sales, the greater the size of a company. The size of the company is a symbol related to the opportunity and ability to enter the capital market and other types of external financing that show the ability to borrow. It was further explained that company size is related to dividend policy where the larger the company size, the greater the dividends that will be distributed. Company size can be used to categorize large and small businesses, which will have an impact on dividend distribution. This is consistent with signal theory because companies that have large company sizes will be considered to adopt a dividend policy to distribute dividends to investors. Because they are considered more stable in generating profits it will generate a positive signal for investors. High profits cause the company to have great potential in distributing dividends to shareholders or a high dividend payout ratio compared to companies with small sizes. The size of the company will get bigger because of the influence of total assets, sales, and large capital investment, so it can be said that company size is a measure of the company’s potential to earn profits and carry out operational activities. To get the value of company size, usually, the calculation of company size can use natural logarithms (Ln). The natural logarithm (Ln) is used to reduce the significant difference between the size of the company that is too large and the size of the company that is too small then the natural logarithm is formed from the total assets, which aims to make the total asset data normally distributed. In this study, company size is calculated using the Ln proxy for total sales. This is done because company size is the average of total net sales in the year concerned for several years where sales are greater than variable costs and fixed costs so that the amount of income before tax will be obtained. To obtain the value of net sales or net profit, the management will carry out a sales plan carefully, as well as exercise proper control, in order to achieve the desired amount of sales to ensure that the company has carried out its business strategy effectively and efficiently (Johanes, 2021; Kuswanta, 2016; Lestari, 2017).

3. **Methods**

This research is causality, which means that this research is structured to see a causal relationship between the influencing variables (independent variable) and the affected variable (the dependent variable). This study explains the dividend policy as the dependent variable which is influenced by profitability, leverage, and company size as the independent variable. Based on the type of data, this research is included in quantitative research. The data used in this study is secondary data, namely data obtained by researchers indirectly through intermediary media. These data were obtained from various sources such as the Indonesian Stock Exchange website (www.idx.co.id) as well as the company’s official website. The sample in this study is a transportation sub-sector manufacturing company listed on the Indonesia Stock Exchange for the period 2017 – 2022. The sampling procedure used in this study was purposive sampling. The sample in this
study was 22 companies. Data analysis was performed using descriptive statistical analysis, classical assumption analysis, multiple linear regression analysis, and hypothesis testing.

4. Results and Discussion

The results of the descriptive statistical analysis show a total sample of 132 from 22 companies for 6 years from 2017 – 2022 through profitability, leverage as well and firm size as the independent variable, and dividend policy as the dependent variable. The profitability variable proxied through ROE from 132 sample data has a minimum value of -5.60 which comes from PT. Sidomulyo Selaras Tbk in 2020, the maximum value of 5.14 comes from PT. Sidomulyo Selaras Tbk in 2021, the average value is 0.0440 and the standard deviation is 0.83142. The mean value of 0.0440 indicates that the sample companies have poor profitability performance because the resulting profitability value is less than 1. This has an impact on the company because the profit received by the company is not optimal, indicating that the value of the dividends to be received will be getting smaller. Variable leverage which is proxied through DER from 132 sample data with a minimum value of -90.30 originating from PT. Sidomulyo Selaras Tbk in 2021, then the maximum value of 41.65 comes from PT. Sidomulyo Selaras Tbk in 2022. The average value is 0.4701 and the standard deviation is 9.16321. The mean value is 0.4701 which means value leverage is at a high level of data variation. An average value of 0.4701 indicates that the value leverage in this study shows that companies use more equity than debt in financing the company. Company size variable proxied through Ln total sales from 132 sample data with a minimum value of 9.10 obtained from PT. Soechi Lines Tbk in 2021, the maximum value of 36.30 comes from PT. Adi Sarana Armada Tbk in 2022. The average value is 24.3386 and the standard deviation is 8.15543. The mean value of 24.3386 is greater than the standard deviation value which indicates that the distribution of firm size values in this study is in good condition. With an average value of 24.3386, it indicates that the total value of sales to transportation companies makes this company a large group of companies. The dividend policy variable proxied through the DPR from 132 sample data has a minimum value of -1533.80 obtained from PT. Berlian Laju Tanker Tbk in 2020, the maximum value of 2090.39 comes from PT. Mitra International Resources Tbk in 2018, and the average value is -4.7199 and the standard deviation is 266.5995. The standard deviation value which is higher than the mean value indicates that the sample variation is quite high. In addition, the standard deviation of this variable is the largest among the other variables, this shows that the DPR is very volatile and has a high level of data variation.

The K-S test results show the Asymp. Sig value (2-tailed) 0.00 < 0.05 which indicates abnormal data. Therefore, the output data is carried out outlier as 57 data, so only 75 data were used in this study. The variable proxied through ROE does not occur because of the value multicollinearity tolerance 0.436 > 0.10 with a VIF value of 2.292 < 10. Variable leverage which is proxied through DER does not occur multicollinearity because of the value tolerance 0.576 > 0.10 with a VIF value of 1.735 < 10. The company size variable proxied by Ln TP does not occur in multicollinearity because the value tolerance is 0.661 > 0.10 with a VIF value of 1.513 < 10. So it can be concluded that there is no multicollinearity between the independent variables. DW value test a number of 1.277 < DU value 1.7092 < value 4 – DU 2.2908. So from these results, it can be concluded that the data is not free from autocorrelation. To ensure again that there is autocorrelation then do a run test on non-parametric test Asymp. Sig (2-tailed) value is 0.061 > 0.05. This shows that the residual data occurs randomly, so it can be concluded that the residual data is free from autocorrelation.

Based on the results of multiple linear regression analysis tests, it can be seen that the coefficients for
the regression equation in this study are formed into a mathematical equation as follows:

\[ Y = -1.627 + 24.985 \text{ (ROE)} + 1.373 \text{ (DER)} - 0.101 \text{ (SIZE)} + e \]

Based on the linear regression equation above, it can be described as follows: The constant value in this regression equation is -1.627, namely if profitability (ROE), leverage (DER), and company size (Ln TP) are fixed or zero, indicating dividend policy (DPR) i.e. -1.627. The ROE coefficient is 24,985, meaning that if ROE and DER are 0, then every 1% increase in profitability (ROE) will cause an increase in the dividend policy (DPR) received by the coefficient value of 24,985. The DER coefficient has a value of 1,373, meaning that if DER and SIZE are 0, then every 1% increase in leverage (DER) will cause an increase in the dividend policy (DPR) received by the coefficient value of 1,373. The SIZE coefficient has a value of -0.101, meaning that if ROE and DER are 0, then every 1% increase in company size (SIZE) will cause a decrease in the dividend policy (DPR) received by the coefficient value of 0.101.

The F test shows a significance value of 0.000, which is <0.05. This means that profitability, leverage, and firm size simultaneously influence dividend policy. The results of the t (partial) test for the profitability variable show a calculated t-value of 3.228 with a significance of 0.002 < α (0.05), indicating that profitability has a negative effect on dividend policy. Variable t (partial) test results leverage shows a calculated t value of 1.491 with a significance of 0.141 > α (0.05), meaning leverage does not have a partial positive effect on the value of the company. The results of the t (partial) test for the variable firm size show a calculated t value of -1.024 with a significance of 0.309 > α (0.05), meaning that firm size does not have a partial negative effect on firm value. R² results show that the adjusted R square value is 0.288. This value means that all independent variables, namely profitability, leverage, and company size, can affect the dividend policy variable by 28.8%, and the remaining 71.2% can be influenced by other variables that are not present in this study, such as current ratio, total assets turnover, growth, and so on (Meidikna, 2020; Monika 2022; Nurfatma, 2020).

Profitability proxied by return on equity (ROE) describes a company's ability to generate net profit after tax using its own capital. The higher the level of profitability, the higher the dividend that will be paid to shareholders. Because companies with high levels of profitability will be able to pay or even increase dividend payments to shareholders, leverage proxied by debt to equity ratio (DER) shows the measurement of the size of the company's debt, where the standard calculation is measured from the ratio of debt to equity. If the DER value is lower, the better for the company. This means that the company’s debt is smaller than all the assets owned by the company to pay off its debts. This means that the higher the debt/equity ratio, the smaller the dividend payout. Company size is proxied by the natural logarithm of total sales. This proves that companies belonging to the group of large companies will find it easier to enter the capital market than small companies, so large companies tend to distribute large amounts of dividends, and this is done to maintain the good name of the company. From this description, it can be concluded that profitability, leverage, and company size have a simultaneous effect on dividend policy in transportation companies listed on the Indonesia Stock Exchange (IDX). This is supported by the signal theory that when a company is able to obtain large profits, it is likely that the dividends distributed will also be higher. That way, it will generate a positive signal to the company’s shareholders (Putu, 2021; Syah 2019).

5. Conclusion

Profitability, leverage, and company size have a simultaneous effect on dividend policy. Profitability has a partial positive effect on dividend policy.
Leverage does not have a partial negative effect on dividend policy. Company size has no positive effect partially on dividend policy.

6. References


