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Profitability, liquidity, leverage, and corporate dividend policy

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Abstract: *This study examines the factors influencing dividend policy: profitability, liquidity, and leverage. The dependent variable of dividend policy is measured using the Dividend Payout Ratio (DPR). The return measures the independent variable of profitability on Equity (ROE) proxy. The independent variables of liquidity are measured using the Current Ratio (CR) proxy, and leverage is measured by the Debt-to-Equity Ratio (DER) proxy. The sampling method was purposive, and data were analyzed using multiple linear regression. The sample was manufacturing sector companies listed on the Indonesia Stock Exchange (IDX) in 2016-2020. The number of observational data used in the test totaled 221 observations. This research shows that profitability positively affects the dividend payout ratio, and other variables, namely liquidity, and leverage, do not affect dividend policy. The research results are expected to add to the research literature on the factors influencing dividend policy.*

Keywords: Dividend payout ratio; Leverage; Liquidity; Profitability.

1. Introduction

The motivation for investors to invest includes, among other things, the hope of getting dividends and capital gains (Dewi & Sedana, 2018). Capital gains are obtained from fluctuations in stock prices. At the same time, dividends are the distribution of retained earnings received by the company, which is agreed upon by the general meeting of shareholders. The percentage of profit paid to investors in the form of dividends is known as the dividend payout ratio (DPR). The number of dividends a company pays is made by considering various matters such as the availability of funds, the need for funds for expansion, and reserves. A large percentage of the dividend payout ratio will impact the availability of profits to invest or expand the company, which is getting lower. However, if the dividend payout ratio distributed by the company is too small, the interest of potential investors who want to invest in the company will be lower (Halim & Hastuti, 2019).

Consideration of the decision on the number of dividends to be distributed also takes into account the company's profitability, liquidity, and leverage ratios. Companies with a good level of profitability are expected to provide higher dividends to shareholders. Conversely, companies with low profits or even losses will tend to avoid sharing profits because the company's condition is assessed as having poor profit performance. It is also possible to consider the liquidity ratio for dividend distribution. Companies must ensure they have enough cash to pay their short-term and dividend obligations. Likewise, with the solvency ratio, the company will be more careful in deciding whether to pay dividends if the company's debt ratio is high. Companies must ensure in advance that they can pay their obligations before distributing profits to shareholders.

Research related to the determinants of dividend payout policy has been carried out, among others, to examine the influence of profitability, liquidity capacity, and solvency of companies. Previous research shows that profitability proxied by the ratio of return on equity (ROE) positively influences dividend policy (Affandi et al., 2018; Halim & Hastuti, 2019; Purba et al., 2019; Sarumpaet & Suhardi, 2019; Sulaeman, 2018; Trisnadewi et al., 2019). In other studies profitability does not affect dividend policy (Aditya et al., 2020; Lismana, 2020; Wijaya, 2017). Research that examines the influence of liquidity on dividend policy shows a positive effect (Firdaus & Purba, 2019; Prasetyo et al., 2021; Sarumpaet & Suhardi, 2019). Those researchs proves that the higher the liquidity ratio, the higher the dividends distributed by the company. The negative effect is shown by the research of Halim & Hastuti (2019) and Sirait et al. (2021). Other studies show that there is no effect between the liquidity ratio and dividend policy (Arsyad et al., 2021; Azhariyah et al., 2021; Marina et al., 2020; Purba et al., 2019; Sebastian & Siauwijaya, 2021; Trisnadewi et al., 2019; Wijaya, 2017).

Some previous studies also examined the relationship between the Debt-to-Equity Ratio on dividend Policy. Some research confirmed a negative relationship between the DER ratio and dividend policy (Halim & Hastuti, 2019; Marina et al., 2020; Sarumpaet & Suhardi, 2019; Sebastian & Siauwijaya, 2021; Trisnadewi et al., 2019). Another study (Widyawati & Indriani, 2019) shows the opposite results, namely the higher the leverage ratio, the higher the level of dividend payments by the company. Other studies show that the leverage ratio does not affect dividend policy (Affandi et al., 2018; Azhariyah et al., 2021; Firdaus & Purba, 2019; Prasetyo et al., 2021; Purba et al., 2019; Wijaya, 2017). The influence of profitability, liquidity, and leverage ratios empirically shows inconsistent results. Therefore, this study will examine the effect of profitability, liquidity, and leverage ratios on company dividend policies. The results of this study are expected to strengthen empirical studies regarding the factors that influence dividend policy.

2. Literature Review & Hypotheses development

2.1. Dividend Signaling Theory

Ross (1977) put forward the dividend signaling theory which explains that companies that provide a high level of dividends tend to experience an increase in stock prices, and companies that offer a low level of dividends will tend to experience a decrease in stock prices. The high dividend payout ratio indicates a good company prospect signal for the

future. In other words, the company is able and has sufficient funds to finance operations and business development plans and is still able to provide dividends to shareholders.

2.2. Dividend Payout Ratio (DPR)

Dividends are cash, shares, or property the company distributes to shareholders (Drake & Fabozzi, 2010). This dividend is considered a form of compensation because shareholders lend capital to the company (McLaney, 2009). Dividends with constant growth are usually given to large, mature companies with predictable profit growth. Dividends tend to be lower in companies with many opportunities to grow so that the funds will be used more for investment. The dividend payout ratio calculation can use dividends per share (cash dividends/number of ordinary shares outstanding) or the dividend payout ratio (DPR). The DPR calculation uses the formula for dividends per share divided by earnings per share.

2.3. Profitability Ratios

Profitability ratios are used to measure company's ability to generate profit from revenue after deducting various costs incurred by the company (Rashid, 2018). The profitability ratio is an indicator of the health condition of the company and how effectively management manages the assets it owns (Lesáková, 2007). Measurement of profitability ratios includes using the return on assets, return on equity, gross profit margin, operating profit margin, and net profit margin (Hery, 2016). A high profitability ratio indicates a good company's ability to generate profits. Investors, creditors, and other stakeholders can consider profitability ratios for decision-making. The ability to generate profits will also be a consideration for the company in making various decisions, including determining the number of dividends to be distributed.

The profitability ratio is a ratio that measures the company's ability to contribute to profits (Kasmir, 2019). This ratio also measures the efficiency and effectiveness of the company's management. A high profitability ratio indicates that the management has managed the company well to provide added value for shareholders. If the company has a high profitability ratio, the company will have an increased tendency to pay dividends to shareholders. Conversely, companies with low levels of profitability or even losses will have a low tendency to set aside profits distributed to shareholders because the assets owned will be used to meet the operational needs of companies that do not have sufficient profits or are in a loss condition. Research by Affandi et al. (2018); Halim & Hastuti (2019); Purba et al. (2019); Sulaeman (2018) and Trisnadewi et al. 2019) shows that the profitability ratio has a positive effect on dividend policy. This means that the higher the profitability ratio, the higher the tendency of the dividend payout ratio. Therefore, the first hypothesis is structured as follows:

H_1: Profitability ratio has a positive effect on dividend policy

2.4. Liquidity Ratio

The liquidity ratio describes how quickly a company can convert its assets into cash (Robinson et al., 2015). This ratio indicates a company's ability to meet its short-term obligations. Liquidity ratios include the current ratio, quick ratio, and cash ratio. The higher

this ratio illustrates that the company is increasingly able to settle its short-term obligations. In the decision to pay dividends, of course, the company will also look at the cash (current assets) it has and whether it is sufficient to pay dividends to shareholders.

The liquidity ratio is a ratio that describes the ability of an entity to settle its short-term liabilities (Kasmir, 2019). One of the liquidity ratio measurements is using the current ratio. The current ratio is calculated by dividing the company's current assets by its current liabilities. A high ratio means that the company is more liquid or, in other words, it can meet its short-term obligations with its current assets. The liquidity ratio is one of the considerations for companies to determine dividend policy, primarily if the company will provide cash dividends. The company will see if the cash held is sufficient to pay dividends to shareholders. Research by Firdaus & Purba (2019); Prasetyo et al. (2021) and Sarumpaet & Suhardi (2019) shows that the liquidity ratio has a positive influence on dividend policy. In other words, the higher the liquidity ratio, the higher the dividend payout ratio. Therefore, the second hypothesis is structured as follows:

H_2: Liquidity ratio has a positive effect on dividend policy

2.5. Leverage Ratio

This ratio is a ratio that measures a company's ability to settle its short-term and long-term obligations. Leverage ratio is a type of financial ratio to assess how much financial risk a company takes (Drake & Fabozzi, 2010). Based on this understanding, it can be interpreted that the leverage ratio is a picture of how much a company's assets are funded with debt. This ratio can be measured by the debt-to-asset ratio, debt-to-total equity ratio, debt-to-capital ratio, and debt-to-EBITDA ratio.

The leverage ratio measures the proportion of assets financed by debt (Kasmir, 2019). A high leverage ratio indicates that the company's funding structure is dominated by debt, so the risks faced by the company will also increase. Funding dominated by debt to third parties will cause the company to be careful in allocating the company's assets because the company bears the obligation to pay debts and interest expenses that arise. Therefore, companies with high leverage ratios will have a low tendency to compensate shareholders in dividends because the profits earned will be prioritized to pay off company obligations. Research by Halim & Hastuti (2019); Marina et al. (2020); Sarumpaet & Suhardi (2019); Sebastian & Siauwijaya (2021) and Trisnadewi et al. (2019) shows that the leverage ratio has a negative effect on dividend policy. This means that the higher the leverage ratio, the lower the tendency of the dividend payout ratio to shareholders. Therefore, the third hypothesis is structured as follows:

H_3: Leverage ratio has a negative effect on dividend policy

3. Method

3.1. Population and Sample

The population in this study are all companies listed on the Indonesia Stock Exchange (IDX) for the 2016-2020 period. The samples used are companies in the manufacturing sector. The

sampling method used is the purposive sampling method which aims to obtain samples with the following criteria:

a. Manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2016-2020 period.
b. The company has published financial reports for the observation period, namely 2016-2020.
c. The company distributes dividends for the 2016-2020 period.

From these criteria, the number of observations obtained was 221 (two hundred and twenty- one) observations. The type of data in this study is secondary data taken from the Indonesian stock exchange website and the company's official website.

3.2. Variable Definition and Operationalization

The dependent variable in this study is the dividend payout ratio (DPR). According to Oktaviani & Basana (2015) the dividend payout ratio is a comparison between dividends per share (DPS) and earnings per share (EPS). The DPR calculation formula is as follows:

$$\textit{Dividen Payout Ratio}\ (\text{DPR}) = \frac{\textit{Dividen per Share}}{\textit{Earning per Share}}$$

Profitability is the ability of a company to earn profits. One of the ratios used to measure profitability is the ratio of return on equity (ROE). This ratio is calculated by comparing profit after tax with total equity, which can be systematically formulated as follows (Trisnadewi et al., 2019):

$$\textit{Return on Equity (ROE)} = \frac{\textit{Earning After Tax}}{\textit{Total Equity}}$$

This liquidity ratio measures a company's ability to pay its current liabilities from current assets owned by a company. One of the liquidity ratios is the current ratio (CR). This ratio can be systematically formulated as follows (Ginting, 2018):

$$\textit{Current Ratio (CR)} = \frac{\textit{Current Assets}}{\textit{Current Liability}} \times 100\%$$

The leverage ratio is a ratio that shows how much a company's assets are funded from debt and capital. One ratio that measures the level of leverage is the debt-to-equity ratio (DER). This ratio compares total debt-to-equity which can be systematically formulated as follows (Ginting, 2018):

$$\textit{Debt-to-Equity Ratio (DER)} = \frac{\textit{Total Debt}}{\textit{Total Equity}} \times 100\%$$

4. Result and Discussion

The descriptive statistics of the research data used are presented in table 1, which shows that the sample data used in this study has a minimum dividend payout rate (DPR) of 0%, a maximum value of 99.67%, and an average of 23.05% of the profits earned by the company. The Return on Equity (ROE) variable has a minimum value of 0.00% and a maximum value of 23,50%; the average value is 1.25%, while the standard deviation is 15.80. The Current Ratio (CR) variable has a minimum value of 0.00%, a maximum value of 12.76%, an average value of 2.54%, and a standard deviation value of 2.01%. The Debt-to-Equity Ratio (DER) variable has a minimum value of 0.08 and a maximum value of 416.69, the average value is 3.01, and the standard deviation is 28.01.

Table 1. Descriptive Statistics

Var	Min (%)	Max (%)	Mean (%)	Std. Dev (%)	N
DPR	0.00	99.67	23.05	29.24	221
ROE	0.00	23.50	1.25	15.80	221
CR	0.00	12.76	2.54	2.01	221
DER	0.08	416.69	3.01	28.01	221

Table 2. Regression Analysis Results

Variabel	Coeeficient	t-stat	Results
Intercept	18.851	5.95	
Return on Equity	0.275	2.23**	H_1: accepted
Current Ratio	1.594	1.64	H_2: rejected
Debt-to-Equity Ratio	-0.051	-0.73	H_3: rejected
Adj. R^2	0.025		
F-Statistic	2.881**		

** Sig < 0.01

The model test results show that the model is feasible to use with a sig value <0.05. The adjusted square value is 0.025 or 2.5%. This means that the independent variables influence the dependent variables by 2.5%, and the remaining 97.5% are explained by other variables that were not examined in this study.

Based on the results of hypothesis testing in table 2 show that Return on Equity (ROE) has a positive influence on dividend policy proxied by the Dividend Payout Ratio (DPR). The positive direction indicates that the higher the return on equity (ROE) ratio, the higher the dividend payout ratio (DPR) is paid to shareholders. The Return on Equity ratio can use to predict whether the company will distribute dividends or not. The results of this study are consistent with the results of research by Affandi et al. (2018); Halim & Hastuti (2019); Lismana (2020); Purba et al. (2019); Sarumpaet & Suhardi (2019); Sulaeman (2018) and Trisnadewi et al. 2019). The research results are inconsistent with research conducted by Wijaya (2017).

Based on table 2, the Current Ratio is proven to have no effect on the Dividend Payout Ratio (DPR). The current ratio variable has no influence in this study because the company sees a prospect or business development (investment) opportunity that will be profitable for

the company. Therefore, the company will tend to keep the profits earned for the purpose of development even though the company has sufficient profits and cash to pay dividends to shareholders. The results of this study are consistent with research conducted by Arsyad et al. (2021); Azhariyah et al. (2021); Marina et al. (2020); Purba et al. (2019); Sebastian & Siauwijaya (2021); Trisnadewi et al. (2019); and Wijaya (2017). The research results are inconsistent with the research of Firdaus & Purba (2019), Halim & Hastuti (2019), Prasetyo et al. (2021), Sarumpaet & Suhardi (2019), and Sirait et al. (2021).

Based on table 2 above, the Debt-to- Equity Ratio (DER) does not affect the Dividend Payout Ratio (DPR). The insignificant results indicate that the debt and capital ratio structure is not a consideration for companies in distributing dividends to shareholders. Dividend distribution to shareholders will be carried out if the company assesses that the available profits are sufficient to be distributed to shareholders. The results of this study are consistent with the results of research conducted by Affandi et al. (2018); Azhariyah et al. (2021); Firdaus & Purba (2019); Prasetyo et al. (2021); Purba et al. (2019) and Wijaya (2017). The research results are inconsistent with the research of Halim & Hastuti (2019); Marina et al. (2020); Sarumpaet & Suhardi (2019); Sebastian & Siauwijaya (2021); Trisnadewi et al. (2019) and Widyawati & Indriani, (2019).

5. Limitations & Suggestions for the Future

This study examines the effect of profitability, liquidity, and leverage on dividend policy as measured by using the dividend payout ratio. The results of this study indicate that only the profitability variable positively affect the dividend payout ratio. Other variables, namely the current and debt-to-equity ratios, have no effect on the dividend payout ratios. The results of this study have limitations. This research only tests financial factors so that future research can add variables other than financial ratios, such as the effect of managerial ownership structure. The percentage of share ownership owned and controlled by active management or commissioners will influence company policy (Jensen & Meckling, 1976). Management ownership will lead to reduced conflicts of interest between agents and management so that the goals of the two parties are aligned. Therefore, managerial ownership will also lead to the same goal as the interests of other shareholders, namely the distribution of profits in the form of dividends.

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