The Effect of Capital Structure and Liquidity on Profitability with Dividend Policy as Moderating Variables In Manufacturing Companies Listed on the Idx for the 2016 – 2020 Period

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Abstract

The authors feel motivated to conduct more profound research on the Effect of Capital Structure and Liquidity on Profitability with Dividend Policy as a Moderating Variable in Manufacturing Companies Listed on the IDX. This study uses a sample survey of 20 manufacturing companies listed on the Indonesia Stock Exchange for the 2016-2020 period. Data analysis with PLS-SEM. The results showed that (1) Capital Structure positively affects Profitability. (2) Liquidity has a positive effect on Profitability. (3) The dividend policy variable cannot moderate the relationship between capital structure and Profitability. (4) The dividend policy variable cannot moderate the relationship between liquidity and profitability. www.idx.com. Future research is expected to be able to develop research with more research samples so that it can describe all objects that affect firm value outside of this research.

Keywords: Capital Structure; Liquidity; Profitability; Dividend Policy; Manufacturing Companies

Introduction

The company must aim to make as much profit as possible efficiently. An investor is usually interested in investing in companies with high yields where there is a dividend policy, namely the company's decision to distribute dividends to shareholders, which is determined by the amount of profit earned.

Companies with high leverage show significant company liabilities, so the dividends distributed will be smaller. In addition, the company's high asset turnover offers the company efficiency to maximize profits. Companies with significant Earnings Per Share (EPS) are of interest to investors because this shows the company's success in obtaining profits.

Companies with a high level of liquidity indicate a big short-term obligation company so that the dividends the company must distribute are getting bigger. A company with profitability certainly has a large bonus that will be distributed to shareholders. Large companies tend to be Profitability, so dividend payments can be distributed more significantly than small companies. Large companies tend to attract the attention of investors in investing their capital.
Manufacturing companies are one of the industries listed on the Indonesia Stock Exchange which have a vital role in the economy, especially the Indonesian economy. However, the phenomenon in manufacturing companies listed on the Indonesia Stock Exchange for the 2016-2020 period tends to fluctuate and decline, especially in 2020. This phenomenon occurred especially in 2020 when net profit fell -14.9% and manufacturing company debt increased to 15.2%; dividends also decreased but not significantly. This empirical data shows that even though manufacturing companies are experiencing pressure due to Covid-19, the company is still trying to distribute dividends, which aims to maintain investor confidence to continue to place their funds. However, according to Rizal et al. (2013), income stability influences dividend policy. Companies with stable incomes will pay higher dividends than companies that do not have a steady income, where income is known as one of the factors that influence the increase or decrease in profits. The higher the payment, the usually profitability profitability tends to increase.

In carrying out its operational activities, a company must be directed at achieving the goals set. According to (Horne and Whacowicz, 2013), the company's primary purpose is to maximize the welfare of its shareholders or the owners of the company (stakeholders). One way to maximize company owners' interest is to maximize their profits. The level of profit earned by the company is related to the level of company profitability. Profitability is the company's ability to make profits from sales, total assets, and own capital (Sartono, 2008). Profitability is significant for companies because it can reflect the success and survival of a company.

Profitability in this study is proxied by Return on Equity (ROE). Return on Equity (ROE) is the most critical ratio among the current profitability ratios (Ang, 2017). In this study, Return on Equity (ROE) is used as an indicator of profitability because it can reflect how much of the rate of return or (return) obtained by the company for all financial resources invested in it. In addition, ROE can account for the company's management's ability to get profits. The level of profitability with the ROE approach aims to measure the power company's management's ability to manage the assets under its control to generate income. Return on Equity (ROE) is obtained by comparing net income after tax to total assets (Horne and Wachowicz, 2013).

Factors influencing company profitability as measured by ROE are capital structure, current ratio, debt-to-equity ratio, and dividend policy. The first factor is the profitability of the company's viz capital network. Capital structure refers to how a company finances assets through a combination of equity and debt (Sarlija and Martina, 2012). According to research by Nasimi (2016), and Fatiha (2015), DER has a significant negative effect on profitability. Inversely proportional to the results of the study-Jafari et al. (2015) stated that capital structure hurts profitability (ROA).

Another factor that affects the company's profitability is liquidity. Liquidity compares current assets and liabilities (Horne and Wachowicz, 2013). Liquidity has a significant effect on profitability. According to research by Negara (2016), the current ratio significantly impacts ROA. In contrast to the research results by Sandhar and Silky (2013), liquidity has a negative and significant effect on company profitability.

In addition, the company's dividend distribution policy is good news that investors will receive and respond to the excellent information by buying company shares. The purchase of company shares will increase the share price, which will affect the profitability increase. This shows that a higher dividend policy will increase profitability. Research conducted by Sari & Sudijinari(2015) states that dividend policy positively and significantly affects profitability. Meanwhile, another study (Mery, 2017) found that there was an effect of dividend policy that could moderate the relationship between liquidity and company profitability. However, another study (Puspitaningtyas, 2017) found an impact of dividend policy that could not moderate the relationship between capital structure and liquidity on company profitability.
Theoretical Framework and Hypothesis Development

Profitability is the ability of a company to achieve profit (Ang, 1997). Profitability is the company's ability to generate profits in a certain period. Profit is often a measure of a company's performance, where when a company has high profits, it means that its performance is good and vice versa. The company's profit is not only an indicator of its ability to fulfill obligations to its funders but also an element in creating company value that shows the company's prospects in the future. Profit is often compared to other financial conditions, such as sales, assets, and equity. This comparison is often called the profitability ratio (Horne and Wachowicz, 2013). The company's ability to remain competitive with other companies requires companies to increase profitability. Profitability is the result of several policies and decisions made by the company (Silaban & Purnawati, 2016).

Fatiha (2015) revealed that the profitability ratio or profitability ratio shows the company's success in generating profits. This ratio can be divided into many types, namely Return on Equity (ROE). Nurfadilah (2011) states that if the capital structure is lower, this reflects the more significant the company's ability to guarantee its debts with its equity, or the increase/decrease in capital structure should not be in the same direction (inversely proportional) to profitability.

Capital structure is equity and debt funding in a company which is often calculated based on the relative size of various funding sources (Rupiah et al., 2016). Apriada (2016) states that the capital structure is a combination of long-term and short-term debt with capital to finance the assets owned by the company. Burhanuddin and Nuraini (2016) say that the capital structure is closely related to the company's funding sources. The company's funding sources can be obtained from permanent equity capital and temporary short-term funding sources with higher risk.

The company's risk level can be reflected in the debt-to-equity ratio, which shows how the company owns much own capital in fulfilling the company's obligations. Liabilities are in the form of long-term debt and short-term debt. The higher the level of debt held by a company, the riskier the company is; conversely, the lower the rate of return on debt, the lower the risk of the company.

According to the results of Hermuningsih's (2013) research, external funding in the form of debt is preferred over own capital originating from outside the company (external). The first is the consideration of emission costs. The cost of issuing bonds is cheaper than the cost of issuing new shares. Second, managers are concerned that the issuance of new shares will be interpreted as bad news by investors and cause the stock price to fall. Or the signal in the form of issuing new shares is construed as the stock price is too high, so the company will be underpriced by investors. This is caused, among other things, by the possibility of asymmetric information between the manager and the capital.

Several previous studies have researched the effect of capital structure on profitability. The results of this study support research conducted by Anwar (2011) and Yegon et al. (2014), which show that capital structure has a positive effect on profitability.

H1: The higher the capital structure, the higher the profitability

According to Sarlija et al. (2012), companies with sufficient liquidity will help companies increase their profitability. Anwar (2011) stated that the better the level of liquidity of current assets or the more liquid the existing assets owned by the company, the greater the profitability figure that the company will receive. Sandhar and Silky (2013) say that liquidity refers to the company's ability to meet its short-term obligations. Short-term is conventionally considered a period of up to one year. This is associated with the company's standard operating cycle, which includes the purchase-production-sales billing cycle. Liquidity is one of the factors that determine the success or failure of a company. The provision of cash needs and the resources to meet these needs also determine the extent to which the company bears the risk. My Dance (2016)said that liquidity is converting assets into cash or obtaining
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money. The short term is conventionally considered a period of up to one year. However, this period is associated with the normal operating cycle of a company (the period that includes buying, producing, selling, and billing cycles).

A liquidity ratio can be used in companies whether the company is able (liquid) or unable (liquid) to pay the company's obligations. The balance is formulated by comparing all components in current assets with passive current (short-term debt) parts. (Ibrahim, 2015). According to Napompech (2012), some of the Liquidity Ratios that we know and might be able to use for research is Current Ratio (Current Ratio).

H2: The higher the company's liquidity, the higher the company's profitability

According to Ramadhani and Maryam (2018), dividend policy involves two parties who have an interest; the first is investors who want a return or returns from their investments, and the second is the company management, who needs these profits to fund acquisitions and company operations in the following year. According to Burhanuddin and Nuraini (2018), there are two types of dividends given to shareholders, namely as follows (1) Cash dividends (dividends) are in the form of cash given by the company to shareholders. (2) Stock dividends (stock dividends) is a dividend given to shareholders in the form of company shares.

Much research on the factors that influence dividend policy has been conducted, although there is no agreement if these factors suit all industries (Palupi & Hendiarto, 2018). Puspitaningtyas (2017) said the factors that affect dividend policy are the Company's Liquidity Position, Profit Stability, Fund Requirement to Pay Debt, Asset Expansion Level, Investment Opportunities, Monitoring Factors, and Government Regulations. In their research, Mariah et al. (2012) stated that ROE had a positive effect on dividend policy; the same thing was stated by Azmi and Agung (2014), who said that dividend policy was affected by ROE in a positively significant manner.

H3: The higher the capital structure, the stronger the effect of dividend policy on profitability

Good liquidity will provide high confidence for investors to invest in the company. This is because the company is considered to have good performance and can maintain its liquidity. Held liquidity will make it easier for the company to distribute dividends to its investors so that if this happens, it is believed to be able to strengthen the company to continue to increase profits from the company.

H4: The greater the liquidity owned by the company, the stronger the effect of the dividend policy on profitability.

The Conceptual Framework describes the research variables used in this study. The research will see the influence of Capital Structure and liquidity as independent variables on Profitability as the dependent variable. This research does not only look at how the dependent variable is influenced by the Independent Variable because there is a moderating variable, namely the Dividend Policy, which will weaken or strengthen the independent variable's influence on the dependent variable. The conceptual framework in this study is shown in the following figure:
Figure 1. Conceptual Framework

Research Methods

This study uses a sample survey as a data collection model. Arikunto (2010) stated that what is meant by a survey is the technique of collecting data from several individuals or units at the same time (or period). The survey was conducted on 20 manufacturing companies listed on the Indonesia Stock Exchange for the 2016-2020 period. The data collection technique used in this research is the documentation technique—data analysis with PLS-SEM. Partial Least Squares is a powerful analytical method and is often referred to as soft modeling because it eliminates OLS (Ordinary Least Squares) regression assumptions, such as the data must be normally distributed in a multivariate manner and there is no multicollinearity problem between exogenous variables (Ghozali and Latan, 2015).

Research Result

Inner models describe the relationship between latent variables based on substantive theory. The structural model is evaluated using $R^2$ for the dependent construct, where changes in the value of $R^2$ can be used to assess the effect of certain independent latent variables on the latent dependent variable and whether it is having a substantive impact (Ghozali, 2014). Based on data processing performed on SmartPLS, which is also shown in Figure 1, the $R^2$ value is obtained as shown in the following table.

Table 1. R Square SmartPLS Value

<table>
<thead>
<tr>
<th></th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROE</td>
<td>0.562</td>
</tr>
</tbody>
</table>

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The value of R Square profitability (ROE) (of 0.562, which indicates that changes in the value of the profitability variable (ROE) can be explained or predicted by the variables of capital structure (DER) and liquidity (CR) of 56.2%, while 43.8% is influenced by other things. R Square value > 0.20 is considered high for (Hair et al., 2014), so it can be concluded that the variables of profitability and dividend policy are considered high values.

**Hypothesis Test**

They tested the hypothesis with the t-test through the bootstrap resampling method to produce t-count values or t-statistics. The t-test was conducted to individually test the significance of the path coefficient of exogenous latent variables to endogenous latent variables (Ghozali, 2014). Hypothesis Testing is carried out using SmartPLS by looking at the Specific Direct and Indirect Effects section to test the strength of the indirect influence X to Y via Z (Handoko, 2021). The variable has a significant effect if the T statistics value has a value > 1.96 or can also be seen from the P Values < 0.5. The results obtained for Specific Indirect Effect Bootstrapping through SmartPLS are shown in the following table.

<table>
<thead>
<tr>
<th>Relationship Between Variables</th>
<th>Original Sample</th>
<th>T-statistics</th>
<th>P-value</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>capital structure -&gt; Profitability</td>
<td>0.184</td>
<td>3.526</td>
<td>0.001</td>
<td>Significant</td>
</tr>
<tr>
<td>liquidity -&gt; Profitability</td>
<td>0.707</td>
<td>13.522</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>capital structure*dividend policy -&gt; Profitability</td>
<td>-0.173</td>
<td>0.479</td>
<td>0.318</td>
<td>Not significant</td>
</tr>
<tr>
<td>liquidity*dividend policy -&gt; Profitability</td>
<td>-0.299</td>
<td>1.311</td>
<td>0.099</td>
<td>Not significant</td>
</tr>
</tbody>
</table>

Based on Table 1, the original sample value is positive (0.184), T statistic (3.526) > 1.96, and P Values (0.001) < 0.05 for the effect of the variable capital structure on profitability, which means that this variable has a positive and significant impact. For the variable liquidity on profitability, the original sample value is positive (0.707), T statistic (13.522) <1.96, and P value (0.000) < 0.05, which means that the variable is positive and significant. It stated that the first and the second hypothesis is not accepted.

The original sample value for the effect of the variable capital structure on profitability which is moderated by dividend policy is negative (-0.173), T statistic (0.479) < 1.96, and P Values (0.318) > 0.05 means that this variable has a positive and insignificant effect, while for the variable liquidity on profitability which is moderated by dividend policy it produces the original sample value is negative (-0.299), T statistic (1.311) <1.96, and P value (0.099) > 0.05 which means that the variable is harmful and not significant. It stated that the third and fourth hypothesis is not accepted.

**Discussion**

**Effect of Capital Structure on Profitability**

Hypothesis 1 states that capital structure has a significant positive effect on profitability. The test results on the parameter coefficient between capital structure and profitability obtained a p-value of 0.024 with a statistical t-value of 2.262, indicating a significant effect. Thus the hypothesis is accepted. This shows that capital structure has a substantial impact on profitability.

It is known that the average value of the debt-to-equity ratio is 0.89, which means that manufacturing companies already have a high level of risk on debt. The signaling theory states that a signal is an action taken by company management to guide investors about how management views the
company's prospects. This theory assumes that managers and shareholders do not have the same access to information.

Asnawi and Wijaya (2006) suggest that the capital structure that affects earnings is debt because debt has costs (interest paid) which will reduce the amount of profit earned while shareholders enjoy profits. The greater the debt used, the greater the interest costs so that the payoff will be smaller; however, the more outstanding the debt used, the smaller the required own capital is; therefore, even though the profit earned is smaller, the means employed is getting smaller.

Kesuma (2009) suggests that the amount of net profit after tax to be obtained by the company will be smaller if the capital structure ratio is more significant because the greater the number of loans, the greater the share of operating profit and cash flow used to pay interest and principal expenses. Loan. Nurfadilah (2011) states that if the capital structure is lower, this reflects the more significant the company's ability to guarantee its debts with its equity, or the increase/decrease in capital structure should not be in the same direction ( inversely proportional) to profitability.

Several previous studies have researched the effect of capital structure on profitability. The results of this study support research conducted by Anwar (2011), Ahmad (2014), Chisti et al. (2014), Shubita and Ahsalwahah (2012), and Yegon et al. (2014), which show that capital structure has a positive effect on profitability.

Effect of Liquidity on Profitability

Hypothesis 2 states that liquidity has a significant positive effect on profitability. The test results on the parameter coefficient between liquidity and profitability obtained a p-value of 0.047 with a statistical t-value of 1.994, indicating a significant effect. Thus Ha is accepted. This shows that liquidity has a positive and significant impact on profitability.

This research supports research conducted previously by Sanjaya and Sudirman (2015), Meidiyustiani (2016), Tarigan and Sudjiman (2015), and Hasnain and Ramlawati (2014); based on the results of the analysis; it was found that liquidity represented by the current ratio has a significant positive effect on profitability. A significant positive impact indicates that the company's ability to fulfill its short-term obligations is getting higher; the higher the current assets owned by the company, the company is more liquid, which means the company can pay the long-term debt.

Effect of Capital Structure on Profitability Moderated by Dividend Policy

Hypothesis 3 concludes that the dividend policy variable cannot moderate the relationship between capital structure and profitability on the IDX for the 2016-2020 period with Pure Moderation moderation. The results of this study are inversely proportional to the bird in the hand theory, which states that investors prefer the expected income in the form of dividends compared to capital gains. Companies that can optimize their capital structure will be able to increase profitability. It is also inversely proportional to the theory which states that pecking order theory, which states that to make decisions on debt, the company must first pay attention to the company's internal ability to finance itself. External sources of funds in terms of capital structure are preferred in the form of debt for two reasons; The first consideration is that the issuance cost is cheaper than the cost of issuing new shares. The two managers were worried that investors would poorly interpret the distribution of new shares.

The results of this study are supported by research by Puspitaningtyas (2017), which finds the effect of dividend policy that cannot moderate the relationship between capital structure and liquidity on company profitability. Contrary to the research result of Mariah et al. (2012), who in their study stated that ROE has a positive effect on dividend policy, the same thing was declared by Azmi and Agung
(2014) and Ottaviani & Mulya(2018), who said that dividend policy is favorable and significantly affected by ROE.

**Effect of Liquidity on Profitability Moderated by Dividend Policy**

Hypothesis 4 concludes that the dividend policy variable cannot moderate the relationship between liquidity and profitability on the IDX for the 2016-2020 period with Pure Moderation moderation. The results of this study are supported by research by Sandhar and Silky (2013), which also states that the interaction of dividend policy with liquidity does not have a positive and significant effect on profitability. The results of research by Horne and Wachowicz (2013) state that the interaction of dividend policy with liquidity on profitability shows no positive impact. That is, the higher the company's liquidity, the lower the company's ability to generate profits.

However, it is inversely proportional to the results of research by Azmi and Agung (2014) and Oktaviani & Mulya (2018) which says that dividend policy can moderate the effect of profitability on a firm's value, which means that when dividends are distributed, it can increase profitability.

**Conclusion**

1. Capital Structure has a positive effect on Profitability. This is because companies that can optimize their capital structure can increase profitability.
2. Liquidity has a positive effect on profitability. Any additional liquidity will be followed by additional profitability because high profits will signal to investors that companies can maximize the use of the funds they invest in the company.
3. The dividend policy variable is not able to moderate the relationship between capital structure and profitability on the IDX for the 2016-2020 period with Pure Moderation type of moderation
4. The dividend policy variable cannot moderate the relationship between liquidity and profitability on the IDX for the 2016-2020 period with the Pure Moderation type of moderation.

**Recommendation**

Based on the results of the research and matters related to the limitations of this research, the following recommendations can be given:

1. For investors, it is hoped that the results of this study can provide information for consideration and brainstorming in making specific decisions related to profitability. This result is expected to help make investment decisions.
2. For further research, it can be used as a reference when researching the effect of capital structure and liquidity on profitability with dividends as a moderating variable so that this research can be developed using different independent, dependent, or moderating variables.

**Research Limitations**

The limitation of this research is that financial reports have been deleted from the Indonesian stock exchange website www.idx.com. Future research is expected to be able to develop analysis using different variables as independent, dependent, or moderating variables and use more research objects and samples so that they can describe all things that affect firm value outside of this research.
References


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