THE EFFECT OF PROFITABILITY, FIRM SIZE, LIQUIDITY, SALES GROWTH ON FIRM VALUE MEDIATED CAPITAL STRUCTURE

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ABSTRACT

This study aims to examine the effect of profitability, firm size, liquidity, and sales growth on firm value in food and beverage companies listed on the Indonesia Stock Exchange (IDX) for the 2013-2018 period, either directly or indirectly through the capital structure. This research is used with a quantitative approach. Sampling using purposive sampling method. Partial Least Square (PLS) is used for analysis and hypothesis testing, then several tests are also carried out for the capital structure variable as a mediating variable. The results showed that firm size and sales growth did not increase the capital structure and firm value. Profitability does not affect the capital structure, but it does affect firm value. Meanwhile, liquidity affects the capital structure, but not firm value. And capital structure affects firm value. The results of the mediation test show that the capital structure is only able to mediate the effect of liquidity on firm value. This explains that the implementation of good liquidity can improve the capital structure generated by the firm, so that the firm value also increases, which ultimately investors respond positively.

Keywords: Profitability, Firm Size, Liquidity, Capital Structure, Firm Value.

INTRODUCTION

The current economic conditions have created a fierce competition between companies in the industry. Competition makes every firm improve its performance so that its goals can be achieved. The main objective of companies that have gone public or listed on the Indonesia Stock Exchange is to increase profits in order to increase the prosperity of the owners or shareholders by increasing the value of the firm which reflects the state of the firm. The better the value of the firm, the more valuable the firm will be seen by potential investors. Firm value is a measure of the success of a firm’s management in past operations and future prospects to convince shareholders.

Chen & Chen (2011), Hermuningsih (2012), Mahendra, et al. (2012), Savitri, et al. (2012), Ahmadimousaabad, et al. (2013), Kinde (2013), Adedoyin (2014), Kodongo, et al. (2014), Thippayan (2014), Safitri (2016), Kosabung, et al. (2017), Mota & Moreira (2017), Thaib & Dewantoro (2017), analyze various variables that affect capital structure so as to increase firm value by using variables of profitability, firm size (size), liquidity and sales growth. These results cannot determine the variables that can precisely affect firm value, because the results are inconsistent. Thus, it is necessary to know that there are several variables that can affect firm value according to Brigham & Houston (10: 2018) capital structure, sales growth, profitability, firm size, dividend policy, liquidity, inflation.

In order for a firm to be able to carry out its operational activities, it must be in a profitable state. Without any profit the firm will find it difficult to get outside funding. Companies that have a high level of profitability will attract investors. Thus, profitability can affect firm value. In this case, according to research conducted by Chen & Chen (2011) which states that the greater the firm's profitability, the more profit is given, and the higher the firm's value. Different results are shown by research by Thaib & Dewantoro (2017) which states that profitability has a negative and insignificant effect on firm value. The high profitability of a firm causes the firm to use more internal funds, because if the profitability is higher, the firm can provide a large amount of retained earnings, so that the firm does not use much funding from outside the firm. The firm will use retained earnings as the main choice in corporate financing so that in the capital structure the use of debt will be lower along with the increase in profitability generated by the firm.

The size of the firm can be said as the firm's ability to provide the amount of funds for various production capacities or services. Firm size also describes the size of the assets owned by a firm. The higher the firm size, the higher the firm value, so that it can attract investors. This was also conveyed by research conducted by Safitri (2016), however, different results were conveyed by research by Kosormasi, et al. (2017) which states that firm size has no effect on firm value. Companies with a larger size have more confidence in getting sources of funds, so that it will be easier to get credit from outside parties. Therefore, a large firm size is a positive signal for creditors to provide loans to companies to carry out their operational activities. So that the size of the firm has a positive effect on the capital structure.

According to Cevheroglu-Acar (2018), liquidity is the ability of a firm to meet short-term financial obligations on time. So that in this case it increases the trust of outsiders in the firm. The same thing was stated by the research results of Mahendra, et al. (2012), however, different results are shown by Thaib & Dewantoro (2017) which states that liquidity has a negative and insignificant effect on firm value. According to the pecking order theory, companies that have high liquidity will tend not to use external financing (debt), because in this theory companies tend to prefer internal funding rather than using external funds because internal sources of funds are considered safer than using external funds and in addition also by using internal funding sources, it will be able to reduce the cost of capital for the firm (Uli, et al., 2020).
According to Widarjo & Setiawan (2009) sales growth reflects the firm's ability over time. The higher the level of sales growth of a firm, the firm is successful in executing its strategy. So that sales growth is a positive thing that can increase firm value. From an investor's point of view, sales growth shows a positive signal where a firm is able to increase profits through its sales and has a positive impact on firm value. These results are in line with research conducted by Kodongo, et al. (2014), however, different results are shown by the research of Sudiani & Darmayanti (2016) which states that companies with high sales growth rates usually do not share profits as dividends but use their profits for expansion. Brigham and Houston (39: 2018) state that companies with relatively stable sales can get more loans compared to companies with unstable sales, because the need for funds used by a firm with a high level of sales will be even greater.

Apart from the variables described above, another variable that determines firm value is the capital structure. The capital structure is used by companies to finance operational activities, business development or other firm investments. In this study, capital structure as an intervening variable. The reason for the capital structure as an intervening variable, namely the capital structure is an important problem for a firm because the good or bad of the capital structure will have a direct impact on the firm's financial position, especially with very large debt which will burden the firm. The optimal capital structure is a capital structure that optimizes the balance between risk and return so that it can maximize share prices (Brigham and Houston, 6: 2018). For this reason, in determining the capital structure of a firm, it is necessary to consider the various variables that effect it. A good capital structure can minimize the cost of capital and maximize firm value that reflects the share price of a firm and the welfare of shareholders.

This research was conducted in the food and beverage sector. The food and beverage industry is currently an industry that has a fairly high growth rate in Indonesia. The reason food and beverage companies are chosen to be the object of research is based on the fact that the level of public consumption of goods produced in an industry has become a constant need. The community's need for food and beverage products will always exist because it is one of the basic needs. Based on this fact, the food and beverage firm is considered to continue to survive.

HYPOTHESIS DEVELOPMENT

Previous studies related to profitability, firm size, liquidity, and sales growth have been carried out in various models, which show the pros and cons of the research findings, especially in their effect on financial performance. Empirically, the theory that states profitability, firm size, liquidity, and sales growth can improve capital structure and firm value is supported by the finding that capital structure has a significant positive effect on firm value (Chen & Chen, 2011; Savitri, et al., 2012; Hermuningsih, 2012; Ahmadimousaabad, et al., 2013; Kinde, 2013; Kodongo, et al., 2014; Thippayana, 2014; Mota & Moreira, 2017; Nhug, et al., 2017; Cevheroglu-Acar, 2018; Mulidah , et al., 2018). The results of this study indicate that the more efficient the firm manages its profitability, firm size, liquidity and sales growth, the more it improves its capital structure. In contrast to the results of other studies which show the opposite that profitability, firm size, liquidity, sales growth have no significant effect on capital structure (Mahendra, et al., 2012; Sudiani & Darmayanti, 2016; Thaib & Dewantoro, 2017; Kosabung, et al., 2012, et al., 2017).

H1 : Increased profitability will reduce the capital structure.
H2 : Increasing the size of the firm will improve the capital structure.
H3 : Increasing liquidity will reduce the capital structure.
H4 : Increased sales growth will improve the capital structure.
H5 : Increased profitability will increase firm value.
H6 : Increasing the size of the firm will increase the value of the firm.
H7 : Increasing liquidity will increase firm value.
H8 : Increased sales growth will increase firm value.
H9 : Increasing the capital structure will reduce firm value.

There are many studies that prove that profitability, firm size, liquidity, and sales growth can improve capital structure (Hermuningsih, 2012; Amelia & Khaerunnisa, 2016; Kosformasi, et al., 2017; Thaib & Dewantoro, 2017; Wahyn, et al., 2018; Pratiwi & Budiarti, 2020; Uli, et al., 2020). However, several researchers stated that profitability, firm size, liquidity, and sales growth had no effect on the capital structure. Thus it can be concluded that there is no clarity regarding the relationship between profitability, firm size, liquidity, sales growth and capital structure (Chen & Chen, 2011; Safitri, 2014; Ilham, et al., 2018; Warsono & Zoebaedi, 2019).

H10 : Increased profitability increases firm value through the mediation of capital structure.
H11 : Increasing the size of the firm will reduce the value of the firm through the mediation of the capital structure.
H12 : Increasing the liquidity of the firm will reduce the value of the firm through the mediation of the capital structure.
H13 : Increasing the firm's sales growth will increase firm value through the mediation of the capital structure.

METHODOLOGY

This type of research is explanatory through a quantitative approach. This research was conducted at food and beverage companies listed on the Indonesia Stock Exchange for six periods (2013-2018). In this study, a non-probability sampling approach was used with a purposive sampling method. Collecting data in this study using the documentation method. Hypothesis testing and analysis using the t test and F test as well as the coefficient of determination by first doing the classical assumption test.
RESULTS

The results of the linearity test with the curve test show that the relationship between the independent variable and the dependent variable is linear, which is indicated by the probability value of each relationship which is smaller than alpha 5% (0.05) so that the linearity assumption is fulfilled. The next stage is hypothesis testing to test the relationship between the dependent and independent variables developed in accordance with the model. The t-statistic is used to determine significant or insignificant and is accepted or rejected. If the T-statistic is more than the t-table 1.96, the hypothesis is accepted and vice versa.

### Tabel 1 Direct Effect Between Variables

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Effect</th>
<th>Original Sample</th>
<th>T-Statistics</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>ROA→DER</td>
<td>0.048</td>
<td>0.373</td>
<td>Not significant</td>
</tr>
<tr>
<td>H2</td>
<td>SIZE→DER</td>
<td>0.069</td>
<td>0.709</td>
<td>Not significant</td>
</tr>
<tr>
<td>H3</td>
<td>CR→DER</td>
<td>-0.391</td>
<td>4.134</td>
<td>Significant</td>
</tr>
<tr>
<td>H4</td>
<td>PP→DER</td>
<td>-0.076</td>
<td>1.045</td>
<td>Not significant</td>
</tr>
<tr>
<td>H5</td>
<td>ROA→PBV</td>
<td>0.787</td>
<td>8.648</td>
<td>Significant</td>
</tr>
<tr>
<td>H6</td>
<td>SIZE→PBV</td>
<td>0.025</td>
<td>0.592</td>
<td>Not significant</td>
</tr>
<tr>
<td>H7</td>
<td>CR→PBV</td>
<td>-0.143</td>
<td>1.620</td>
<td>Not significant</td>
</tr>
<tr>
<td>H8</td>
<td>PP→PBV</td>
<td>-0.008</td>
<td>0.097</td>
<td>Not significant</td>
</tr>
<tr>
<td>H9</td>
<td>DER→PBV</td>
<td>0.226</td>
<td>2.666</td>
<td>Significant</td>
</tr>
</tbody>
</table>

### Tabel 2 Indirect Effect Between Variables

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Effect</th>
<th>Original Sample</th>
<th>T-Statistics</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>H10</td>
<td>ROA→DER→PBV</td>
<td>0.011</td>
<td>0.389</td>
<td>Not significant</td>
</tr>
<tr>
<td>H11</td>
<td>Size→DER→PBV</td>
<td>0.016</td>
<td>0.683</td>
<td>Not significant</td>
</tr>
<tr>
<td>H12</td>
<td>CR→DER→PBV</td>
<td>-0.088</td>
<td>1.963</td>
<td>Significant</td>
</tr>
<tr>
<td>H13</td>
<td>PP→DER→PBV</td>
<td>-0.017</td>
<td>1.124</td>
<td>Not significant</td>
</tr>
</tbody>
</table>

DISCUSSION

The Effect of Profitability on Capital Structure

The results of this study indicate that profitability has no effect on capital structure. Where the results of this study contradict the results of research conducted by Savitri, et al. (2012), Hermuningsih (2012) and Ahmadimousaad, et al. (2013) that there is a significant effect between profitability and capital structure. The results are insignificant due to the insufficient revenue growth to purchase firm assets, so the firm needs to use external funding to purchase firm assets. Mufidah, et al. (2018) said that the orientation of profitability in the previous period allowed firm management to consider that it did not affect the firm's capital structure decisions caused by rising food and beverage raw material prices which caused firm profitability to decrease. The profitability that does not affect the capital structure is caused by several things. Declining sales cause the firm to experience a decrease in revenue. The decline in sales was due to lower demand due to decreased purchasing power. Economic slowdown, weakening of the rupiah exchange rate against foreign currencies, new regulations issued by Bank Indonesia, and rising prices for food and beverage raw materials. This result is not in accordance with the pecking order theory which states that companies prefer to use internal funding as a source of funding, if external funding is needed the firm will issue securities first, due to an economic slowdown which causes the firm's profitability to decline and the pre-order system so that it does not too dependent on debt or equity funding sources.
The Effect of Firm Size on Capital Structure

The results of this study indicate that firm size has no effect on capital structure. Where the results of this study contradict the results of research conducted by Savitri, et al. (2012), Kinde (2013), Thippayana (2014) that there is a significant effect between firm size and capital structure. The possibility that can occur from the results of this study in accordance with the pecking order theory is that companies tend to prefer internal funding rather than debt so that the size of the firm has no effect on the use of external sources of funds. Another possibility is that large companies that have easier access to the capital market compared to small companies are not necessarily able to obtain funds easily in the capital market. This is because investors will buy shares or invest not only considering the size of the firm, but also considering other factors, such as firm prospects, the nature of the firm's current management and so on.

The Effect of Liquidity on Capital Structure

The results of this study indicate that liquidity has a significant effect on the capital structure with a negative direction, which shows the opposite relationship between liquidity and capital structure. This means that when there is an increase in liquidity, the firm's capital structure will decrease, and vice versa. According to the pecking order theory, companies with high levels of liquidity will prefer to use internal sources of funds first before making new financial investments. According to the pecking order theory, companies that have high liquidity tend not to use debt financing. This is because companies with high liquidity have large internal funds, so that these companies will use their internal funds first to finance their investments before using external financing through debt. Ceveroglu-Acar (2018) argues that a firm's high liquidity position shows the firm's ability to meet its short-term obligations such as paying off its debts that are due in the short term. With large retained earnings, companies will prefer to use retained earnings before using debt or issuing new shares.

The Effect of Sales Growth on Capital Structure

The results of this study indicate that sales growth has no effect on capital structure. The results of this study are not in accordance with the theory put forward by Brigham and Houston (2016: 189) which states that companies with high growth rates generally depend more on external capital (debt), so that the firm's capital structure will increase. The discrepancy of research results with theory can occur for several reasons. One of the possibilities that can occur from the results of this study is because the increasing growth of the firm indicates an increase in sales which causes the firm to need additional capital to support the firm's development. In accordance with the signaling theory, companies with high growth will be more attractive to investors because they indicate favorable prospects for investors so that there will be confidence for investors to invest in the firm. Hence, the high growth rate does not guarantee the firm to use debt, so that the growth rate does not affect the capital structure, and the rate of increase tends to increase the rate of increment.

The Effect of Profitability on Firm Value

The results of this study indicate that profitability has an effect on firm value with a positive direction, which indicates a unidirectional relationship between profitability and firm value. This means that when there is an increase in profitability, the firm value will also increase, and vice versa. The effect of profitability on firm value is based on the signaling theory which explains that a firm with the ability to generate and increase its profit stably will be seen as a positive signal for investors regarding firm performance (Chen & Chen, 2011). If investors respond positively to the firm's performance, of course, it will also have a positive impact on the firm's assessment in accordance with the theory expressed by Fama and French (2000). Hermuningsih (2012) also states that firm value is related to the firm's profit prospects along with the amount of new investment needed to generate this profit.

The Effect of Firm Size on Firm Value

The results of this study indicate that firm size has no effect on firm value, which means that large firm size is not always followed by an increase in firm value. The bigger the firm, the more debt the firm needs to finance its operational activities, the use of debt owned by the firm is not efficient because the interest costs are greater than the profitability obtained by the firm, so this can increase the risk in the firm, consequently the interest of investors investing decreases.

The Effect of Liquidity on Firm Value

The results of this study indicate that liquidity has no effect on firm value. The results of this study indicate that high and low liquidity have no effect on firm value. Current ratio (CR) as one of the proxies of low liquidity will not affect the value of the firm, this only shows a problem with the firm's capability to pay its short-term debt but it does not mean that the firm's value will decrease. However, with a current ratio (CR) that is too high, it is not good because it shows the large number of idle funds, which means that there is no turnover of funds to generate profits or profits for the firm. This will result in a decrease in the confidence of investors or potential investors because they will assume that the firm is not performing well. High liquidity does not necessarily increase the value of the firm, because there are idle assets that the firm management does not use to carry out firm activities in generating profits for the firm so that investors will see this as a negative signal. This result is not in accordance with the signaling theory which states that the firm's ability to meet short-term obligations will get a positive signal because it is seen that the firm will provide prospects in the future.

The Effect of Sales Growth on Firm Value

The results of this study indicate that sales growth has no effect on firm value, meaning that the level of sales growth does not affect firm value. This condition indicates that the level of sales growth is not taken into consideration by investors in investing, this is because the high and low sales levels in the firm do not guarantee the level of return expected by investors. It is possible for investors to use other growth rates for consideration such as the rate of profit growth or the growth of the firm. The results of this
study are in line with research conducted by Kodongo, et al. (2014) which shows that sales growth does not have a significant effect on firm value.

The Effect of Capital Structure on Firm Value
The results of this study indicate that the capital structure has an effect on firm value with a positive direction, which indicates a unidirectional relationship between capital structure and firm value. This means that when there is an increase in the capital structure, the firm value will also increase, and vice versa. For every firm, the decision in choosing a source of funds is important because it will affect the firm's financial structure, which in turn will affect the firm's performance. The higher the debt to finance the firm's operations, the lower the firm's value because with a high level of debt, the burden to be borne by the firm is also large. If the firm increasingly uses long-term debt to finance its assets, it can increase the value of the firm. This is in accordance with the trade-off theory where companies can take advantage of debt while the benefits (tax savings and other costs) are compared to the sacrifice (paying interest).

The Effect between Profitability and Firm Value through Capital Structure
The results of this study indicate that the capital structure does not have a mediating role in the effect of profitability on firm value. With retained earnings as their own capital, managers manage these funds for the firm's operational activities using a low capital structure. Thus, it can be seen, the firm uses low debt. The use of low debt, then the risk of bankruptcy is low, so that it can attract investors to buy these shares, the demand for shares is high, then the share price is high. The high share price reflects high firm value. This is in line with the pecking order theory which states that companies prefer internal funding first, and if the firm requires external funding in the form of debt. Companies will issue the safest securities first, such as bonds. If the firm still needs outside funding, the firm will issue new shares.

The Effect between Firm Size and Firm Value through Capital Structure
The results of this study indicate that capital structure does not have a mediating role in the effect of firm size on firm value. Pratiwi & Budiarti (2020) explain that companies that have a large firm size, access to funding (debt) will be easy. With the funds obtained, if the firm uses debt more than the optimal level, it will reduce the value of the firm, because the risk of bankruptcy experienced by the firm is high. This is in line with the tradeoff theory which states that the firm uses an optimal capital structure, and if the firm is not optimally managing that capital, the firm will experience a decrease in value, so that investors see that there is a risk to the firm which results in less attracting investors to companies that can lowering firm value.

The Effect between Liquidity and Firm Value through Capital Structure
The results of this study indicate that the capital structure has a mediating role with the direction of the negative correlation on the effect of liquidity on firm value. On the results of data processing, liquidity is not able to have a direct effect on firm value. Then when mediated by the capital structure, the effect of liquidity is found to increase firm value. One of the reasons this happens is because investors pay more attention to how the firm produces a capital structure directly because a high capital structure shows better firm performance (Thaib & Dewantoro, 2017). The results of this study support the results of research conducted by Thaib & Dewantoro (2017), Wahyu, et al. (2018), Uli, et al. (2020).

The Effect between Sales Growth and Firm Value through Capital Structure
The results of this study indicate that the capital structure does not have a mediating role in the effect of sales growth on firm value. The higher or lower the capital structure is not able to mediate the relationship between sales growth and firm value. Owned capital structure will not affect sales growth and firm value because sales growth can only be increased if the firm implements a good marketing strategy in accordance with the conditions at that time. Sales growth opportunities for each firm are different, causing differences in spending decisions taken by financial managers (Isnawati & Widjajanti, 2019). Isnawati & Widjajanti (2019) also explain that different sectors have different growth opportunities here, so that the size of the capital structure does not really affect the effect of sales growth on firm value.

CONCLUSIONS AND SUGGESTIONS

Conclusion
The results of this study indicate that in general the profitability of firm size, liquidity, and sales growth of the firm do not have a significant effect on the capital structure and firm value. Efficiency of profitability, firm size, liquidity, and sales growth are generally required by companies to improve their capital structure and firm value. However, the firm also considers not only efficiency, but also the effectiveness of reducing profitability, firm size, liquidity and sales growth. In this case, there needs to be an effort to maintain a balance between the level of liquidity and profitability in order to further enhance the capital structure and firm value. Reductions in profitability, firm size, liquidity, and sales growth do not mean that the firm is poorly managed as long as reduced profitability, firm size, liquidity, and sales growth have significant benefits especially for companies that are growing or developing. However, the firm must also continue to monitor the addition of its capital structure so that its growth does not exceed its sales growth. If not properly monitored, these additions will have a bad impact on the firm's performance and investors will judge the firm to be incompetent in managing its operational activities.

Suggestion
The researcher noted that there were limitations to this study. First, there is other information that is not published in the firm's annual report so that it cannot be included in data processing and analysis of each variable relationship. Second, the results of this
study are not representative enough to represent all public companies in Indonesia. Therefore, further research can retest this research model in different research contexts and perspectives and use different measurement models. For food and beverages companies, they must be able to manage profitability, firm size, liquidity, and sales growth in an effective and efficient way to improve their capital structure so that the firm value is better. The results of this study contribute to the importance of profitability, firm size, liquidity, and sales growth in the food and beverage sector in improving capital structure and also firm value.

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