Optimal Financial Leverage Determinants For Smes Capital Structure Decision Making: Empirical Evidence From Indonesia

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Abstracts: The purpose of conducting this research is to determine the effect of company characteristics and the characteristics of SMEs owners on the targeted leverage. This research is a quantitative study in nature with a sample of research is SMEs located in Banyumas Regency, Central Java, Indonesia. This study employed multiple linear regression analysis with e-views (econometric views) program on panel data as a statistical approach. The results showed that the variable of growth rate, company size, liquidity, and asset structure significantly influence the leverage of SMEs. Further, profitability has a negative effect but not significant on SMEs leverage. While the variable characteristics of SME owners also have an impact on SMEs leverage. Results of statistical analysis also show that variables such as knowledge, experience, and risk propensity have a significant effect on SMEs leverage. Finally, gender differences statistically have no significant effect on the SMEs leverage. The results of this study are expected to provide information for SME owners about factors that influence corporate leverage decisions in terms of company characteristics and characteristics of SME owners/managers.

Index-Term: Company Characteristics, Characteristics of SME Owners/Managers, SME, and Leverage

1. INTRODUCTION
Research on dynamic capital structure theory is now developing into the next stage, which is identifying and scrutiny the factors that influence the speed of adjustment to targeted leverage. This is a crucial issue in current capital structure research (Huang & Ritter, 2009). The level of adjustment to optimal debt depends on the intrinsic characteristics of the company (Hesmati, 2001; Lopez-Gracia & Sogorb-Mira, 2008). The results of previous studies indicate differences in research results regarding company characteristics of the determinants of capital structure, including profitability, asset structure, firm size, liquidity, and growth. Suwartini (2015) argues that the determinants of capital structure can be in the form of company characteristics that can have an impact on the adjustment cost. This research only employed five variables that determine the capital structure, namely, profitability, asset structure, firm size, liquidity, and growth. These variables are theoretically an indicator that can illustrate the company's financial condition and show the company's performance (Indrajaya et al., 2015), while Michaelas (1998) explains that the characteristics of SMEs owners can influence decision making on corporate funding. The characteristics of SMEs owners include gender, business objectives, risks to debt decision making, experience and level of knowledge. Therefore, this study will test the effect of company characteristics and SMEs owner characteristics on leverage decision making.

2. LITERATURE REVIEW AND HYPOTHESES
The company's capital structure is one of the fundamental factors in a company's operations. The capital structure of a company is determined by the financing policy of the financial manager, who is always faced with both qualitative and quantitative considerations. One of the most critical issues challenged by financial managers is determining the optimal capital structure. Megginson (1997) Trade-off theory models illustrate that the optimal model structure can be determined by balancing the benefits of using debt with financial costs and agency problems (Yuningsih, 2002). Whereas, Mutma'nah (2013) states that the optimal capital structure is achieved when there is a balance between the benefits of using debt with the cost of using debt. This research uses a proxy for leverage level that is the ratio of total debt as a dependent variable (Newman, 2011; Najjar, 2011; Cekrezi, 2013; Ayed & Zouari, 2014; Nejed et al., 2015; Yang et al., 2015). While, the independent variable uses company characteristic factors that can determine the optimal capital structure in SMEs (e.g. profitability, growth rates, liquidity, company size and company asset structure). The degree of profitability has a different effect on the leverage that is targeted by the company. Titman & Wessel (1988) found that companies with high rates of profit in the past tended to use lower debt. Jensen & Mckling (1976) explains that companies with a high level of profitability tend to use more debt levels. These results can be concluded that the level of profitability affects the company's leverage. Titman & Wessel (1988) explain that agency costs between shareholders and debt holders are higher in companies in growing industries, so there is a negative relationship between growth and leverage. The results of the research by Heshmati (2001) and Titman & Wessel (1988) explain that the level of sales growth affects the company's leverage. Heshmati's research results (2001) explain that in the case of small companies with concentrated ownership and companies in growing conditions, external funding will be needed so that in this condition the company has a higher level of debt. So there is a positive relationship between the company's growth rate and corporate leverage. Size of the company has the effect of different
against the leverage of the company. Titman & Wessel (1988) explain that company size has a positive influence on leverage. Large companies have small bankruptcy costs and tend to be identified and allow companies to use higher debt capacity. It can be concluded that the company's size influences company leverage. Liquidity has a significant impact on the debt ratio. There is a negative relationship because of the potential for liquidity and conflicts between shareholders and lenders; however, liquidity can also produce positive effects at a high level (Saarani et al., 2013). Research from Najjar (2011), Ayed & Zouari (2014), Basu (2015) explains that the level of liquidity has a significant effect on the level of debt (short-term debt and long-term debt/leverage). However, the results of research from Nejed et al. (2015), Alipour et al. (2015), Yang et al. (2015), Cekrezi (2013) explains that the level of liquidity has an insignificant relationship to the level of debt (leverage). There is a different relationship between the level of liquidity and the optimal level of leverage. The results of the study by Najjar (2011) and Basu (2015) explain that the level of liquidity affects the company's leverage. Jensen & Meckling (1976) explained that companies that have substantial tangible assets, the higher the company's ability to use debt to finance the company because tangible assets can be used as collateral for debt and reduce debt agency costs. Titman & Wessel (1988) explain the positive effect of leverage. Asset structure influences positively to leverage in terms of the proportion of long-term debt, the proportion of total debt and the proportion of debt market value to total assets. The results of this study support the trade-off theory and the pecking order theory. The level of knowledge is a characteristic of SME owners/managers that can influence capital structure decision making (Michaelas, 1998; Edger & Zuzana, 2014). Bhagat's research (2011) explains that the level of ability of managers can influence leverage decision making. At SMEs the level of knowledge owned by the owner/manager is needed for decision making on the determination of funding from debt, so that knowledge can influence the decisions of SME leverage. The level of experience needed in determining the decision making on SME. The characteristics of SME owners/managers in the form of experience influence the decision making related to capital/leverage structure (Michaelas, 1998; Singal & Gerde, 2015). Edger & Zuzana's research (2014) explains the different results that experience can have an insignificant effect on corporate funding decisions. The characteristics of SME owners/managers explain that attitudes towards corporate risk/risk to propensity can influence SME capital structure decision making (Michaelas, 1998). Research by Bhagat et al. (2011) explains that the level of risk both the risk of short-term and long-term risks to the debt collection will be determinant to the increase in the use of leveraged companies. Based on the background and literature review can be determined by the following hypothesis:

H1: Company characteristics influence leverage targeted at SME in Banyumas Regency.

H2: The characteristics of SME owners/managers influence the leverage targeted at SME in Banyumas Regency.

3. RESEARCH METHOD

This research is a quantitative study which is a study that performs calculations on research variables. The data used comes from SME financial statements from 2015 to 2018. Sampling techniques using purposive sampling techniques using specific criteria to obtain the information needed and obtained from those able to provide information following the research objectives. The research sample will be taken in seven sub-districts with the consideration that the seven sub-districts are trade and industrial centres. The sample was adjusted to 2015 SME data obtained from the Department of Trade and Cooperatives Industry of Banyumas Regency, which is spread across 7 (seven) districts of trade and industry centres in Banyumas Regency. The analysis used in this study is multiple linear regression analysis with reviews program, while the data used is pool data. This study uses a variable used to examine the factors that determine the capital structure in order to estimate the leverage target is using the associated variables are leverage and the independent variable is a characteristic of the company include profitability, asset structure, growth companies, company size and liquidity. The proxy used as a measurement in this study is in accordance with the proxy that has been used in previous studies Titman & Wessels (1988), Newman (2011); Najjar (2011); Cekrezi (2013); Ayed & Zouari (2014); Nejed et al. (2015); Yang et al., (2015), Saarani & Shahadan (2013), Yang et al. (2015), Cekrezi (2013), Ayed & Zouari (2014), Nejed et al. (2015), Matemilola (2011), Memon et al. (2015). Calculation p for the leverage level is the debt ratio which is the ratio between total debt to total assets. The profitability variable is measured by the ratio between earnings before interest and taxes with total assets. The growth rate can be measured by the growth sales ratio that is by changing the level of sales of year t compared to sales of year t-1. Company size describes the size of the company indicated by total assets / is the size or size of assets owned by the company. This proxy is measured by the natural logarithm of total assets (Ln of total assets). While the variable liquidity, the company's ability to meet the immediate short-term liabilities with their possessions. This proxy is measured by the current ratio, which is the ratio between current assets and current debt. Furthermore, for the structure of the variable of assets, a proportion of the ratio between fixed assets with the total assets owned by the company where the asset structure can show how much tangible fixed assets owned by the company. The owner/manager characteristics variable of SME (owner characteristics diversity) is a qualitative data. So that the data can be calculated quantitatively, it uses a dummy (puppet variable) to represent the variable characteristics of the SME owner/manager. The characteristics of SME owners/managers in the form of gender, knowledge, experience, risk propensity are determined as dummy variables in this study. Owner Characteristics Diversity (OCD) is a new concept in this study, where the SME owner-manager characteristic variables that influence capital structure decision making are identified from gender, knowledge, experience, and risk propensity (Jackson, 1995; Michaelas, 1998).
4. DISCUSSION

Based on the results of multiple linear regression analysis with many e-views programs, the statistical results obtained in this study are as follows:

Table. 1. The results of the analysis of the company's characteristics and owner/manager characteristics that influence the leverage of SMEs

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std error</th>
<th>t-statistic</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>6.8528</td>
<td>0.8228</td>
<td>8.3328</td>
<td>0.000</td>
</tr>
<tr>
<td>PROF</td>
<td>-</td>
<td>0.089</td>
<td>0.7728</td>
<td>0.440</td>
</tr>
<tr>
<td>GROW</td>
<td>-</td>
<td>0.1520</td>
<td>-2.3938</td>
<td>0.017</td>
</tr>
<tr>
<td>SIZE</td>
<td>-</td>
<td>0.0443</td>
<td>8.7395</td>
<td>0.000</td>
</tr>
<tr>
<td>LIQ</td>
<td>0.1364</td>
<td>0.0302</td>
<td>4.5074</td>
<td>0.000</td>
</tr>
<tr>
<td>US</td>
<td>-</td>
<td>0.0705</td>
<td>2.6839</td>
<td>0.007</td>
</tr>
<tr>
<td>DGENDER</td>
<td>0.0737</td>
<td>0.0412</td>
<td>1.7866</td>
<td>0.074</td>
</tr>
<tr>
<td>DKNOW</td>
<td>0.1318</td>
<td>0.0439</td>
<td>2.9972</td>
<td>0.002</td>
</tr>
<tr>
<td>DEXP</td>
<td>0.2683</td>
<td>0.0458</td>
<td>5.8480</td>
<td>0.000</td>
</tr>
<tr>
<td>DRISKPRO</td>
<td>0.1440</td>
<td>0.0424</td>
<td>3.3970</td>
<td>0.000</td>
</tr>
<tr>
<td>R-Squared</td>
<td>0.2957</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R-Squared</td>
<td>0.2738</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SE of regression</td>
<td>0.3527</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-Statistics</td>
<td>13.542</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Testing the effect of profitability on SME on leverage shows that the regression coefficient has a negative effect and is not significant. Thus the hypothesis which states that the profitability variable influences leverage is rejected. The level of profitability has a negative effect indicated by a regression coefficient of -0.022391 and a significance level of 0.4401. These results explain that a higher level of profitability causes the lower use of SME leverage or debt and shows no significant effect. SMEs in Banyumas Regency has a high level of profitability, so they tend to use a low level of debt. Therefore SME in Banyumas Regency will meet their capital needs from internal sources, that is, from the level of profits obtained. This condition implies that the level of equity obtained from internal SME is cheaper than the equity obtained from external. The results of this study are following the findings of Titman and Wessels (1998), that companies with high-profit levels in the past tend to use low levels of debt. The results support the pecking order theory, which implies that equity obtained from private companies is cheaper than equity obtained from external. The results of this study support the theory with equity obtained from external sources. The results of this study are consistent with previous research which states that profitability has a negative and significant influence on corporate leverage (Titman and Wessels, 1998; Sogrob-Mira, 2005; Najjar, 2011; Cekrezi, 2013; Hull, 2014; Ayed and Zouari, 2013 2014; Nejjed et al., 2015; Alipour et al., 2015; Matemilola, 2011). Testing the effect of the growth of SMEs to leverage shows that the regression coefficient negative and significant effect. Thus the hypothesis which states that the growth variable influences the leverage is accepted. The growth rate has a negative effect indicated by a regression coefficient of -0.363891 and a significance level of 0.0171. These results explain that the higher growth rate causes the lower use of SME leverage or debt and shows a significant effect. SME in Banyumas Regency has a high level of sales growth, so they tend to use a low level of debt. This implies that with a high level of sales growth will generate high profits so that SMEs will reduce the level of use of debt because capital needs have been met from the benefits obtained. The results of this study are in line with the results of previous studies which state that growth rates influence leverage (Lopez-Gracia, 2015; Sogor-Mira, 2015; Hadiningsih, 2015; Nejjed et al., 2015; and Alipour et al., 2015). Testing the effect of company size / firm size of SME on leverage shows that the regression coefficient has a negative and significant effect. Thus the hypothesis which states that company size variables affect the leverage is accepted. The level of company size has a negative effect shown by the regression coefficient of -0.387677 and a significance level of 0.0000. These results explain that the higher level of company size causes the lower use of SME leverage/debt and shows a significant effect. Companies with a high level of company size tend to use a low level of debt, and this implies that the greater the size of the company with a high level of sales and profits will increasingly decrease the level of use of debt because the company's capital needs have been met from the company's profits. The results of this study which explain that the size of the company has a negative influence is similar with the previous result which states that the size of the company has a negative and significant effect on leverage (Ayed and Zouari, 2014; Nugroho, 2014; Nejjed, 2015; Alipour et al., 2015; Basu, 2015; Memon et al., 2015). The effect of SME Liquidity structure on leverage shows that the regression coefficient has a positive and significant effect. Thus the hypothesis which states that the variable liquidity affects the leverage is accepted. The level of liquidity has a positive effect, as indicated by a regression coefficient of 0.136400 and a significance level of 0.0000. These results explain that a higher level of liquidity causes a higher use of SME leverage/debt and shows a significant effect. Companies with high levels of liquidity tend to use high levels of debt; this implies that companies with high levels of ability to meet short-term obligations will tend to use more debt to meet their capital needs. The results of this study are in line with the results of previous studies which explain that the level of liquidity has a positive and significant influence on the use of leverage (Loof, 2004; Hadiningsih, 2012; Nugroho, 2014; Raude et al., 2015; Acaurai, 2015; Matemilola, 2011). Testing the effect of SME asset on leverage shows that the regression coefficient has a negative and significant effect. Thus the hypothesis which states that the profitability factor influences the leverage is accepted. The level of asset structure has a negative effect indicated by a regression coefficient of -0.189348 and a
The influence of the decision to use a certain level of leverage in the level of experience possessed by SME owners/managers. The level of experience of SME owners/managers can be seen from the length of time they have spent. This study is in line with previous research which explains that experience influences leverage (Edger and Zusana, 2014; Singal and Gerde, 2015). Testing the effect of the characteristics of SME owners/managers as seen from the dummy attitude towards risk to the propensity to leverage shows that the regression coefficient has a positive and significant effect. Thus the hypothesis which states that the attitude dummy variable towards risk influences leverage is accepted. The level of dummy attitude towards risk has a negative effect indicated by a regression coefficient of -0.144046 and a significance level of 0.0008. These results explain that the higher attitude towards risk owned by SME owners/managers influences SME leverage/debt decision making and shows a significant effect. Owners/managers who have attitudes towards high risk tend to have a lower influence on corporate debt decisions. Conversely, if the attitude towards risk owned by SME owners/managers is low, the higher the company's leverage. This implies that differences will influence the decision to use a certain level of leverage in the level of attitude towards risk held by the SME owner/manager. The attitude towards the risk of SME owners/managers is seen from the attitude in making debt decisions, which is like the risk of taking debt or disliking the risk of taking debt. The results of this study are in line with previous research which explains that attitudes towards debt risk affect leverage (Bhagat, 2011).

5. CONCLUSION

Company characteristics are a factor that affects the leverage of SME in Banyumas Regency. Variable-rate of growth, company size, liquidity, and asset structure significantly influence the leverage of SME in Banyumas. While the variable profitability has a negative effect and no significant effect on leverage SME in Banyumas. While the variable characteristics of SME owners/managers also influence leverage on SME in Banyumas Regency. Variable levels of knowledge, experience, and attitude to risk/risk propensity to have a significant effect on the leverage of SMEs in the district of Banyumas. While the gender variable has no significant effect on the leverage of SME in Banyumas Regency. The insignificant influence shows that the decision making of SME capital/leverage structure is not influenced by the gender of the SME owner/manager, where both men and women have the same decision on the SME capital/capital structure leverage decision.

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