Determinant of Capital Structure Policy on Infrastructure, Utility and Transportation Companies

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Abstract

The aim of this research is to analyze the effect of profitability, firm size, asset structure, growth and effective tax rate effect on capital structure policy. The population in this research are 56 infrastructure, utilities and transportation companies listed in Indonesian Stock Exchange (BEI) for the period 2012-2015. Based on purposive sampling method, obtained by a sample 17 companies with 68 unit of analysis. This study uses descriptive statistics and inferential statistics. The results showed that profitability has a negative and significant effect on capital structure. Growth and effective tax rate have positive and significant effect to capital structure, while firm size and asset structure have positive but not significant effect on capital structure. The conclusion of this research is profitability, growth and effective tax rate effect on capital structure policy. Variable profitability, firm size, asset structure, growth and effective tax rate simultaneously affect the capital structure. Large companies and companies with high asset structures prefer to use internal financing in the form of retained earnings rather than external financing of debt.

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INTRODUCTION

Competition in the world of business and economy causes the financial aspects of a company becomes very important with the purpose of building and ensuring the life of the company (Setyawan et al., 2016). Companies need to pay attention to funding decisions in ensuring its business continuity. Given the decision regarding funding for the company is very important in the operational activities of the company. Manager will take the decision to not only fund the needs of the company's funds with own capital, but also accompanied by funding from outside the company in the form of debt withdrawal for consideration of tax deductible benefits incurred (Muslikhatun, 2016). This opinion is consistent with the trade-off theory which states that (1) interest paid as tax deductible makes debt cheaper than common and preferred stock, (2) in the real world no firm uses a hundred percent debt ratio to reduce the impact of bankruptcy, (3) the existence of limits on the level of debt.

According to Riyanto (2012), if the need for funds has increased as the company grows, and internal funds have been used all, there is no choice but to use funds from outside the company, either from debt (debt financing) or by issuing new equity (external equity financing) in meeting the need for funds. Capital structure is a permanent expenditure which reflects the balance between long-term debt and own capital (Riyanto, 2012). Capital structure becomes a very important problem for company because good bad capital structure will affect the financial condition of a company. Optimal capital structure is a condition where corporate capital structure can balance between risk and return that will maximize corporate stock price (Brigham & Houston, 2013). But in fact, there are still many companies that use debt as capital larger than the capital itself. PT Arpeni Pratama Ocean Line Tbk (APOL) is one of the companies engaged in transportation, in the financial statements of 2015 experienced a deficit of Rp 6.18 trillion, capital deficiency Rp5.13 trillion, and debt ratio to own capital of 1.33. The high ratio of debt to own capital, so the company does not have the ability to pay interest on loans from principal loan that has matured. PT Arpeni Pratama Ocean Line Tbk (APOL) plans to restructure the company's debt. This becomes the cause of the company's 2015 financial statements did not state disclaimer and not an unnatural opinion (adverse). In addition, the company experiences a significant deficit and weakens the company's financial position. This raises substantial doubt on the ability of the company to maintain its business continuity (Cakti, 2015).

According to Brigham & Houston (2013), there are several factors affecting the capital structure, namely, sales stability, asset structure, operating leverage, growth rate, profitability, taxes, control, management attitude, lender attitude and rating agencies, market conditions, internal condition of the company, and financial flexibility. In this study uses five factors that affect the capital structure such as profitability, firm size, asset structure, growth, and effective tax rate (ETR).

Previous research which links profitability to the capital structure conducted by Alib & Suryono (2014) and Alipour et al.(2015) shows that profitability has a negative and significant effect on the capital structure. This result is contrary to research conducted by Ichwan & Widyawati (2015) states that profitability has a positive and significant effect on capital structure. Previous research on the effect of firm size on capital structure is done by Setyawan et al.(2016) shows that firm size has a positive effect on capital structure. However, research conducted by Abidah (2013) shows that firm size has positive but not significant effect on capital structure. Research on the influence of asset structure on capital structure conducted by Ichwan & Widyawati (2015) states that the asset structure has a positive and significant effect on capital structure. The study is in contrast to research conducted by Setyawan et al. (2016) which states that the asset structure has a negative and significant effect on capital structure. Research on the relationship of growth to capital structure conducted by Abidah (2013) and Daskalakis et al. (2014) state that the growth of companies has a
positive effect on capital structure. Other research conducted by Alib & Suryono (2014) shows that growth has no significant effect on capital structure. Various previous researches on the factors that affect the capital structure have been done a lot. The results of the research show inconsistency (contradictory) so it brings up a research gap. The purpose of this study is to analyze the effect of profitability, firm size, asset structure, growth and effective tax rate to the capital structure in infrastructure, utilities and transportation sector companies listed in Indonesia Stock Exchange (IDX) in 2012-2015.

The theory underlying this research is trade-off theory and pecking order theory. According to Brigham & Houston (2013) trade-off theory is a theory of the capital structure which states that firms exchanging tax benefits from debt financing with problems caused by the potential of bankruptcy. Pecking order theory developed by Myers & Majluf (1984) states that there is a hierarchy in financing decision making between internal capital to external capital. This pecking order theory embraces financing decisions with a logical preference sequence of investors against the prospect of the company and is consistent with the goal in order to managers are able to maximize shareholder wealth (Harjito, 2011). Pecking order theory states that companies prefer internal financing. If external financing is required, companies will choose to issue the safest securities previously, that is by issuing bonds, followed by convertible bonds, if it is insufficient, new shares are issued. Internal financing sources can be in form of stock capital, reserves, and retained earnings (Riyanto, 2012). According to Mamduh (2008) in Widayanti et al. (2016), profitability is a company's ability to generate profits (earnings) at the level of sales, certain capital stock assets. Kasmir (2014) states that profitability is a ratio to assess the ability of companies in gaining profit. A high level of profitability allows a company to use most of its funding with internal funds in the form of retained earnings. Alib & Suryono (2014), Liem et al. (2013), Alipour et al. (2015) and Juliantika & Dewi S (2016), state that profitability has a negative and significant effect on capital structure.

H1: Profitability has a negative and significant effect on capital structure.

The size of a company is a description of big small a company that can be seen from equity, total assets, sales amount that shows the financial strength of the company. Larger companies tend to use higher debt as an external source of funds if internal financing sources are insufficient. Large companies generally need more funds to support their operational needs. Companies with larger sizes have many options to determine the source of funding used than the smaller size of the company. According to Eriotis et al. (2007), banks are more willing to lend to large companies because they are more diverse and large firms typically ask for larger amounts of debt than small firms. In accordance with trade-off theory in capital structure, it states that firms must be able to balance the benefits and sacrifices that arise as due to the use of debt so that no financial distress occurs. Abidah (2013), Alib & Suryono (2014), and Setyawan et al. (2016) states that firm size has a positive and significant effect on capital structure.

H2: Firm size has a positive and significant effect on capital structure.

Companies with high fixed assets amount there is capital embedded in these assets which are large enough. The asset of the company can be used as collateral when the company uses external funding in the form of debt. Trade off theory states that companies must be able to balance the benefits and sacrifices gained from the use of debt. According to Muslikhatun (2016), an increase in assets followed by increased operating results will increase the trust of outsiders to the company. Increased trust of outsiders or creditors will make it easier for companies to attract loans, so this will affect the capital structure of the company. According to Murhadi (2011), companies that have more real assets will have better positions when making loans. The greater the asset structure of a company, it allows the company to use external funding because the corporate assets can be used as collateral for the capital.
The result of research conducted by Ichwan & Widyawati (2015) shows that the asset structure has a positive and significant effect on capital structure.

H₃: Asset Structure has a positive and significant effect on capital structure.

According to Abidah (2013) corporate growth is the ability of a company to increase the company's assets. The company's growth reflects the level of expansion that was tried by looking at the growth of the assets used in the operations of the company. Companies with high growth of assets, the possibility of the company will lack of funds in carrying out its operational activities. As for issuing new shares requires a high cost, then the company will prefer debt as a source of funding for corporate profits remain optimal. This is in accordance with the theory of trade-off which states that companies should be able to balance the benefits with the sacrifice obtained from the use of debt. Larger companies are able to process debt with assets owned, so that the company can increase its productivity and generate huge profits from its operational activities. The statement is supported by research conducted by Abidah (2013) and Daskalakis et al. (2014) which shows that the growth of the company) which is proxied with the growth of assets have a positive and significant impact on capital structure.

H₄: Growth has a positive and significant effect on capital structure.

Companies that use a lot of external capital in the form of debt as a source of funding, then the interest paid by the company will be even greater. The interest payments are used as an expense which can reduce the tax rate paid by the company. The higher the tax rate paid by the company, the company will prefer to use more debt, because the debt interest can reduce the tax rate paid by the company. Trade-off theory Trade-off theory states that companies exchange tax benefits from debt financing to reduce the tax burden, as interest expense is tax deductible, and tax deductions will be more valuable to firms with high tax rates (Brigham & Houston, 2013). Research conducted by Setyawan et al. (2016) shows that the effectiveness tax rate (ETR) has a positive and significant effect on capital structure. International research conducted by Alipour et al. (2015) shows the same result that is effective tax rate (ETR) has a positive effect on capital structure proxied with debt ratios.

H₅: Effective tax rate has positive and significant effect on capital structure

The trade-off theory explains that firms must consider the benefits and disadvantages of using debt so that the company will avoid the possibility of financial distress. The selection of capital structure used by the company must be in accordance with the needs and conditions of the company. How the level of corporate profitability, how the assets owned by the company can be used as collateral, how the company is able to save tax expenses. These conditions need to be considered when the company determines the capital structure policy.

H₆: Profitability, firm size, asset structure, growth and effective tax rate simultaneously effect on capital structure.

Based on the description that has been presented, here is presented framework which is poured in the research model described in Figure 1:

![Figure 1. Research Model](image-url)
METHODS

The population in this study were all infrastructure, utilities and transportation companies listed in Indonesia Stock Exchange (IDX) period 2012-2015. The sample in this research was obtained by using purposive sampling technique shown in table 1:

Table 1. Sampling Criteria

<table>
<thead>
<tr>
<th>No</th>
<th>Explanation</th>
<th>Not Criteria</th>
<th>Included Criteria</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The infrastructure, utilities and transportation companies in IDX in the period 2012-2015</td>
<td></td>
<td>(56)</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Companies that published financial statements for the period 2012-2015</td>
<td>(19)</td>
<td>(37)</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Companies that presented financial statements in rupiah currency</td>
<td>(17)</td>
<td>(20)</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Companies that presented the complete data required in the study</td>
<td>(2)</td>
<td>(18)</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Companies that had data outlier</td>
<td>(1)</td>
<td>(17)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of Research Samples</td>
<td></td>
<td>(17)</td>
<td></td>
</tr>
</tbody>
</table>

The dependent variable in this study was the capital structure, while the independent variables were profitability, firm size, asset structure, growth and effective tax rate. The operational definition of research variables could be seen in table 2:

Table 2. Operational Definition of Variable

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Structure (LTDtER)</td>
<td>Permanent expenditure which reflects the balance between long-term debt and own capital (Riyanto, 2012)</td>
<td>$\frac{\text{LTDtER}}{\text{Equity}} = \frac{\text{Long Term Debt}}{\text{Equity}}$ (Kasmir, 2014)</td>
</tr>
<tr>
<td>Profitability (ROA)</td>
<td>Ratio to assess a company’s ability to generate a profit (Kasmir, 2014)</td>
<td>$\text{ROA} = \frac{\text{Profit after tax}}{\text{Total Asset}}$ (Kasmir, 2014)</td>
</tr>
<tr>
<td>Firm size (SIZE)</td>
<td>The size or amount of assets owned by the company (Pradana et al., 2013)</td>
<td>$\text{Firm Size} = \ln(\text{Total Asset})$ (Alib &amp; Suryono, 2014)</td>
</tr>
<tr>
<td>Asset Structure (SA)</td>
<td>Corporate wealth or economic resources which are expected to be able to give benefits in the future (Ichwan &amp; Widyawati, 2015)</td>
<td>$\text{Struktur Aktiva} = \frac{\text{Fixed Assets (Aktiva Tetap)}}{\text{Total Asset}}$ (Setyawan et al., 2016)</td>
</tr>
<tr>
<td>Growth (GRWT)</td>
<td>The ability of company to increase corporate assets (Abidah, 2013)</td>
<td>$\text{Growth} = \frac{\text{Total Asset} t - \text{Total Asset} t - 1}{\text{Total Asset} t - 1}$ (Ismail et al., 2015)</td>
</tr>
<tr>
<td>Effective Tax Rate (ETR)</td>
<td>Percentage of the ideal rate in the company based on the financial information generated (Aunalal, 2011 in Setyawan et al., 2016)</td>
<td>$\text{ETR} = \frac{\text{Tax Expense}}{\text{EBT}}$ (Setyawan et al., 2016)</td>
</tr>
</tbody>
</table>

Source: from various sources
Data collection techniques used in this study was the method of documentation from secondary data in the form of annual financial statements of infrastructure, utilities and transportation companies listed on the Indonesia Stock Exchange (IDX) period 2012-2015 as well as conducting literature studies and reviewing various literature such as research articles, books and other resources needed in the study. Data analysis techniques used in this study were descriptive statistical analysis and inferential statistical analysis namely, classical assumption test, multiple linear regression analysis and hypothesis test using SPSS version 21. Multiple linear regression model was systematically expressed in the form of equation as follows:

\[ \text{LTDtER} = b_0 + b_1 \text{ROA} + b_2 \text{SIZE} + b_3 \text{SA} + b_4 \text{GRWT} + b_5 \text{ETR} + \epsilon \]

**RESULTS AND DISCUSSIONS**

Descriptive statistics was used to give illustration or descriptions about research variables that included maximum value, minimum value, average, and standard deviation. The result of descriptive statistical test was presented in table 3 as follows:

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTDtER</td>
<td>68</td>
<td>0.8746</td>
<td>0.78107</td>
</tr>
<tr>
<td>ROA</td>
<td>68</td>
<td>0.0645</td>
<td>0.08643</td>
</tr>
<tr>
<td>SIZE</td>
<td>68</td>
<td>28.6857</td>
<td>1.87598</td>
</tr>
<tr>
<td>SA</td>
<td>68</td>
<td>0.4527</td>
<td>0.34618</td>
</tr>
<tr>
<td>GRWT</td>
<td>68</td>
<td>0.1728</td>
<td>0.26662</td>
</tr>
<tr>
<td>ETR</td>
<td>68</td>
<td>0.1770</td>
<td>0.18764</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>68</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Secondary data processed, 2017

The capital structure was measured using a long term debt to equity ratio (LTDtER) proxy by comparing long-term debt with the own capital (equity) of the company. The mean value of the capital structure of the sample companies was 0.8746 fell into the low category. The results showed that the sample companies have a long-term debt of 0.8746 times the company's own capital (equity). The average value was less than one indicating that the infrastructure, utilities, and transportation companies period 2012-2015 preferred to use their own capital instead of using long-term debt. The average profitability value of the sample was 0.0645 included in the medium category. This indicated that the average of infrastructure, utility and transportation companies for the period 2012-2015 was able to earn 6.45 percent of total assets owned by the company.

The average of firm size variable (size) of infrastructure, utility and transportation companies was 28.6857. This value included into the medium category. This meant that in general, infrastructure, utility and transportation companies had firm size in the medium category that was assessed based on total assets owned by the company. The average value of asset structure of infrastructure, utility and transportation companies was 0.4527. This value included into the medium category. The average indicated that, in general, infrastructure, utility and transportation companies had an asset structure in the medium category or about 45% of the total assets owned by the company were fixed assets.

The average value of growth variable of infrastructure, utilities and transportation companies was 0.1728. This value included into the medium category. This meant that in general, infrastructure, utilities and transportation companies had a growth rate in the medium category which was assessed based on the assets growth owned by the companies for the period of 2012-2015.
The comparison between companies that had high and low growth rate was equal. The average value of effective tax rate (ETR) variable of infrastructure, utilities and transportation companies was 0.1770. This value included into the medium category. This meant that in general, infrastructure, utility and transportation companies had an effective tax rate in the medium category about 18% of pre-tax revenues.

Based on the results of classical assumption test, the data used was said to be normal and the model in this study was free from the occurrence of multicollinearity, heteroscedasticity, and autocorrelation.

Table 4. The Result of Hypothesis Test

<table>
<thead>
<tr>
<th>No</th>
<th>Hypothesis</th>
<th>B</th>
<th>α</th>
<th>Sig.</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>H1: Profitability had a negative and significant effect on capital structure</td>
<td>-3.046</td>
<td>0.05</td>
<td>0.004</td>
<td>Accepted</td>
</tr>
<tr>
<td>2.</td>
<td>H2: Firm size had a positive and significant effect on capital structure</td>
<td>0.074</td>
<td>0.05</td>
<td>0.106</td>
<td>Rejected</td>
</tr>
<tr>
<td>3.</td>
<td>H3: The structure of assets had a positive and significant effect on capital structure</td>
<td>0.071</td>
<td>0.05</td>
<td>0.787</td>
<td>Rejected</td>
</tr>
<tr>
<td>4.</td>
<td>H4: Growth has a positive and significant effect on capital structure</td>
<td>0.996</td>
<td>0.05</td>
<td>0.003</td>
<td>Accepted</td>
</tr>
<tr>
<td>5.</td>
<td>H5: Effective tax rate had a positive and significant effect on capital structure</td>
<td>0.957</td>
<td>0.05</td>
<td>0.039</td>
<td>Accepted</td>
</tr>
<tr>
<td>6.</td>
<td>H6: Profitability, firm size, asset structure, growth and effective tax rate simultaneously affected on the capital structure</td>
<td></td>
<td>0.05</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

Source: Output SPSS 21, 2017

The result of statistical test partially showed that profitability had a negative and significant effect on the capital structure. The result of this study was in line with the research conducted by Alib & Suryono (2014), Liem et al. (2013) and Alipour et al. (2015) and Juliantika & Dewi S (2016) which stated that profitability had a negative and significant effect on capital structure. This showed that the size of the profitability level of infrastructure, utilities and transportation companies significantly affected the capital structure of the companies. If the level of corporate profitability was high, then the companies would reduce the level of debt in its capital structure policy. This was due to companies with high profitability tended to use relatively little debt. High retained earnings were sufficient to finance most of the company's funding needs. The results of this study were in accordance with pecking order theory which stated that companies preferred internal funding rather than external funding. In general, profitability was an effectiveness measurement of a company's performance that would ultimately show the efficiency and productivity of the company. The level of profitability of a company was very important in the survival of the company in long term. This profitability would show whether the company has good prospects in the future.

The result of statistical tests partially indicated that firm size had positive but not significant effect on the capital structure. The result of this study was in line with research conducted by Abidah (2013) and Wardani et al. (2016) which stated that the size of the company had a positive but insignificant effect on the capital structure. That is, in infrastructure, utilities and transportation companies research period 2012-2015 did not found significant influence between firm size on
capital structure. The size of a company that was assessed from total assets indicated that the larger the size of a company meant that it had a larger total asset than a small company. The amount of total assets owned, allowing the company to meet the funding needs of companies with internal capital, namely by maximizing total assets as a support of corporate operations to optimize the profitability level of the company. Not all profits generated by the company were distributed to investors in the form of dividends, but those benefits were used as additional capital for the company in the form of retained earnings. The company preferred to use internal financing because it was less risky than using external financing in the form of debt. In addition, the ease of obtaining funds in the capital market and the low costs incurred to issue equity caused the proportion of debt usage to be lower (Kurniawan & Yuyetta, 2015).

A description of the firm size data showed that from 68 analysis units there were 38 units of analysis which were below average. The amount of companies that had a small firm size impacted on the significance of the test results. Besides, some companies which had large firm size instead used relatively little debt such as PT Telekomunikasi Indonesia, PT Indosat and PT Jasa Marga. Meanwhile, companies with small firm size used large debts to fund the company's operations such as PT Weha Transportasi Indonesia, PT Pelayaran Tempuran Emas and PT Nusantara Infrastruktur. According to Riyanto (2012), a large company in which its shares were widely distributed, each expansion of share capital would have little effect on the possibility of loss of control or displacement of control from the dominant side to the company concerned. On the other hand, small companies whose shares were scattered in small environments, the addition of stocks would have a major impact on the loss of dominant control over the company concerned. Thus, large companies with widespread stocks would be more daring to issue new shares as additional capital to meet their operational needs than small companies.

This hypothesis used the point of view of the trade-off theory which stated that companies must be able to balance the benefits and sacrifices that arose as a result of the use of debt so that no financial distress occurred. The use of excessive debt and not in accordance with the ability of the company would be more burdensome when paying off the debt. In addition to paying its principal debts, the company must also pay interest on the debt. Therefore, the company must be able to manage the debt well in order to be absorbed maximally. Large company sizes tended to have great assets as well. The large amount of assets allowed companies to use more debt with the assumption that the assets were capable of covering the debt. Based on the results of the analysis, showed that firm size had no significant effect on capital structure. The results of this study leaded to pecking order theory which stated that companies preferred to use internal capital rather than external capital.

The result of statistical test partially showed that the asset structure had a positive but not significant effect on the capital structure. The result of this study was in line with previous research conducted by Zuliani & Asyik (2014) and Ismail et al.(2015) which stated that the asset structure (asset) had positive but not significant effect on the capital structure. It meant it was not found significant influence between asset structure to capital structure in infrastructure, utilities and transportation companies in research period 2012-2015. This showed that the size of the asset structure level infrastructure, utilities and transportation companies had no significant effect on the capital structure of the company. According to Seftianne & Handayani(2011), asset structure is companies that most of the capital is embedded in fixed assets will remain prioritizing the fulfilment of its capital needs from the permanent capital of their own capital and loan capital. The result of this study was not in accordance with the theory of trade-off which stated that companies should rely on debt as a source of funding, but to a certain extent that the company can balance the costs and benefits arising from the use of debt. The results of this study tended to support the pecking order theory which stated that companies preferred internal financing in the form of retained
earnings rather than external financing. Companies that can finance the needs of their fixed assets with internal funds can reduce the risk of bankruptcy faced the company (Eviani, 2015).

Hypothesis 3 (H3) which stated that the asset structure had a positive and significant effect was rejected. This could be due to the fact that most of the firms with high asset structure used more internal capital in the form of retained earnings as funding than external capital in the form of debt. To minimize the risks arising from the use of debt, some companies preferred to use internal funding sources and limited the use of debt. For example in the research sample, PT Leyand International Tbk was a company that had a high asset structure, but the level of capital structure (debt) of the company was very low. This was supported by the pecking order theory which stated that companies preferred internal funding (retained earnings) first. Because internal funding sources had less risk than external sources of funding that had a greater risk of interest and other costs incurred.

The result of statistical test partially showed that growth had a positive and significant effect on capital structure. The result of this study was in line with the research conducted by Abidah (2013) which stated that the growth of companies (growth) which was proxied with the growth of assets had a positive and significant effect on the capital structure. That was, it has been found significant influence between growth on capital structure in infrastructure, utilities and transportation company research period 2012-2015. Growth of the company was proxied by the proportion of the company's total asset increase from year to year.

Companies that had faster growth should rely more heavily on external capital. In addition, the cost of emissions associated with the sale of common stocks would exceed the cost of emissions that occurred when companies sold debt, encouraging companies that experienced rapid growth to rely more heavily on debt (Brigham & Houston, 2013). This was in accordance with the trade-off theory which stated that companies to better maximize the use of debt. However, companies should also consider the benefits and costs or sacrifices arising from the use of such debt in order to avoid financial distress. Excessive use of debt did not guarantee the company would grow, it could be because of high debt and not accompanied by high profits also made the company overwhelmed in paying off the debt so that the company would suffer a prolonged loss and financial distress. Good capital management would determine the sustainability of the company in the future.

The result of statistical test partially showed that effective tax rate (ETR) had a positive and significant effect on the capital structure. The result of this study was in line with research conducted by Setyawan et al. (2016), Alipour et al. (2015) which stated that effective tax rate (ETR) had a positive and significant effect on the capital structure proxied with debt ratios. This meant that in infrastructure, utilities and transportation companies from 2012 to 2015, there has been a significant influence between effective tax rate (ETR) on the capital structure. This showed that the size of the Effective Tax Rate (ETR) of infrastructure, utilities and transportation companies significantly affected the capital structure of the company. If the effective tax rate (ETR) increased, then the capital structure would also increase. Conversely, if the effective tax rate (ETR) decreased, then the capital structure would also decrease.

Tax was a liability which must be paid by every taxpayer in this case the company on income received to the state. The tax rate was adjusted to the profits generated by the company. The higher the tax, the company would use more debt because the use of debt would generate interest debt that could reduce the tax rate paid by the company (Setyawan et al., 2016). When companies used more debt as a source of funding, the interest on the debt to be paid was also greater. The interest payments were used as interest expense which could reduce the tax rate paid by the company. The existence of a positive and significant influence between the effective tax rate (ETR) on the capital structure supported the trade-off theory which stated that the company exchanged tax benefits from debt financing to reduce the tax burden, as interest expense was tax deduction, and tax deduction would be more valuable for companies with high tax rates (Brigham & Houston, 2013). High tax
implementation would encourage companies to make tax savings, one of them by increasing the debt so that debt interest could reduce the tax rate paid by the company.

CONCLUSIONS

The result of the analysis and discussion shows that the capital structure has the average value of 0.8746 includes into the low category, profitability has an average value of 0.0645 includes into the medium category, the size of the company has an average value of 28.6857 includes in the medium category, the asset structure has an average value of 0.4527 included in the medium category, growth has an average value of 0.1728 includes in the medium category and effective tax rate has an average value of 0.1770 includes in the medium category. Profitability has a negative and significant effect on capital structure, growth and effective tax rate have positive and significant effect to capital structure in infrastructure, utility and transportation companies for the period of 2012-2015. Profitability, firm size, asset structure, growth and effective tax rate simultaneously affect the capital structure of infrastructure, utility and transportation companies for the period 2012-2015. Firm size and asset structure have positive but insignificant effect on the capital structure in infrastructure, utility and transportation companies during 2012-2015 period. This is because large companies with high asset structures prefer to use internal financing in the form of retained earnings rather than external financing in the form of long-term debt. Internal financing is considered to be less risky than using external financing in the form of debt on interest and debt costs incurred.

Investors should understand relevant information through the financial statements published by the company considering the financial ratios, especially profitability ratio, growth and effective tax rate before taking investment decisions in the capital market. Company management must be able to optimize the value of profitability, growth and effective tax rate in determining the capital structure policy of the company. Subsequent research should increase the number of samples and prolong the study period in order to obtain better and more accurate results. In addition, researchers can also add or use other factors that can affect the capital structure such as business risk.

REFERENCES


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