The Effect of Current Ratio (CR) and Assets Structure on Debt To Equity Ratio (DER) in PT Aneka Tambang Tbk from 2011 to 2020

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Abstract
This study aims to determine the effect of the current ratio (CR) on the debt to equity ratio (DER) and the effect of asset structure on the debt to equity ratio (DER) partially and the effect of the current ratio (CR) and asset structure on the debt to equity ratio (DER) simultaneously at PT Aneka Tambang Tbk for the 2011-2020 period. The research method used in this study is descriptive quantitative. The population of this study is the annual financial statements of PT Aneka Tambang Tbk for the period 2011-2020 and the sample in this study is the financial position statements of PT Aneka Tambang Tbk for the period 2011-2020. Data analysis used hypothesis testing with t and F statistical tests using SPSS (Statistical Product and Service Solutions) 25. Partial research results show that the current ratio (CR) has no effect on debt to equity ratio (DER). Asset structure has no effect on the debt to equity ratio (DER). The results of the study simultaneously stated that the current ratio (CR) and asset structure had no effect on the debt to equity ratio (DER).

Keywords: Current Ratio (CR); Asset Structure; Debt To Equity Ratio (DER)

JEL Classification: G34

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Introduction

In this study, the independent variable that the researcher wanted to examine was the liquidity ratio, which was proxied by the current ratio and asset structure, and then the capital structure, which was proxied as the debt-to-equity ratio, as the dependent variable in the company PT Aneka Tambang Tbk. Researchers want to know how influential the level of the current ratio; ability to pay short-term debt and asset structure; guaranteed wealth against debt to equity ratio; equity owned by the company. The following is data on PT Aneka Tambang Tbk’s financial ratios as measured by the current ratio, asset structure and debt to equity ratio in the 2011-2020 annual financial reports.

Table 1 Current Ratio, Assets Structure, and Debt to Equity Ratio at PT Aneka Tambang Tbk from 2011 to 2020

<table>
<thead>
<tr>
<th>No</th>
<th>Year</th>
<th>Current Ratio (%)</th>
<th>Assets Structure (%)</th>
<th>Debt to Equity Ratio (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2011</td>
<td>1064,23</td>
<td>40,08</td>
<td>41,12</td>
</tr>
<tr>
<td>2</td>
<td>2012</td>
<td>251,42</td>
<td>61,20</td>
<td>53,59</td>
</tr>
<tr>
<td>3</td>
<td>2013</td>
<td>183,64</td>
<td>67,62</td>
<td>70,91</td>
</tr>
<tr>
<td>4</td>
<td>2014</td>
<td>164,21</td>
<td>71,23</td>
<td>84,79</td>
</tr>
<tr>
<td>5</td>
<td>2015</td>
<td>259,32</td>
<td>62,93</td>
<td>65,73</td>
</tr>
<tr>
<td>6</td>
<td>2016</td>
<td>244,24</td>
<td>64,54</td>
<td>62,87</td>
</tr>
<tr>
<td>7</td>
<td>2017</td>
<td>162,13</td>
<td>70,01</td>
<td>62,32</td>
</tr>
<tr>
<td>8</td>
<td>2018</td>
<td>154,19</td>
<td>74,68</td>
<td>68,73</td>
</tr>
<tr>
<td>9</td>
<td>2019</td>
<td>144,81</td>
<td>74,61</td>
<td>66,52</td>
</tr>
<tr>
<td>10</td>
<td>2020</td>
<td>121,15</td>
<td>71,16</td>
<td>66,65</td>
</tr>
</tbody>
</table>

Source: Financial Report on PT. Aneka Tambang Tbk
Figure 1 Current Ratio, Assets Structure, and Debt to Equity Ratio at PT Aneka Tambang Tbk from 2011 to 2020

In the graph the current ratio at PT Aneka Tambang Tbk experienced a significant decrease of 1,064.23% in 2011 to 2012 of 251.42%, then in the following year it fluctuated, in the end in 2020 it reached a value of 121.15%. This shows that the average changes inconsistently because it experiences periodic decreases and increases. So this states that PT Aneka Tambang Tbk is still unstable in paying its current debts because the company's finances are not yet stable.

Then in the graph presented the asset structure looks fluctuating, the article can be seen in 2011 amounting to 40.08% which then increased in value until 2014 amounting to 71.23%. then decreased in 2014 by 62.93% and then gradually increased until 2020 by 71.16%. This can be said that PT Aneka Tambang Tbk has assets or assets that are deemed inadequate. Thus PT Aneka Tambang has not been able to obtain external funding or capital to develop its business.

In the process of research conducted by researchers, researchers studied previous studies, researchers found inconsistencies in the results of previous researchers regarding the object under study. The current ratio has an effect on capital structure (DER) (Anggriani & Huda, 2020) but it is different from the results that the current ratio has no effect on capital structure (DER) (Adhitya, Endy & Santioso, Inconsistencies in research results also occur in research (Rico Andika & Sedana, 2019) which states that asset structure affects capital structure (DER), while research conducted by (Pramana, I Wayan Satya; Darmayanti, 2020) states that asset structure has no effect on the debt to equity ratio.
Based on the description above, it can be concluded that the results of the ratio chart fluctuate every year and the results of previous studies which are still inconsistent because the current ratio and asset structure as a factor of the debt to equity ratio still have various different results, so it is necessary to re-test. Thus, the researcher chose the title "The Influence of Current Ratio (CR) and Asset Structure on Debt To Equity Ratio (DER) at PT Aneka Tambang Tbk from 2011 to 2020."

**Literature Review**

**Current Ratio (CR)**

According to Harmono (2015: 106) "current ratio is a measure of a company's ability to pay off a number of short-term debts, generally less than one year". Meanwhile, according to Brigham and Houston (2014: 134) "proposed that the current ratio (current ratio) is the main liquidity ratio which is calculated by dividing current assets with current liabilities".

According to Subramanyam (2017: 143) "the reasons for the widespread use of the current ratio as a measure of liquidity include its ability to measure:

1. **Coverage of short-term liabilities**
   
   The higher the amount of current assets to short term liabilities, the greater guarantee we have that short term liabilities will be paid.

2. **Buffer in the event of a loss**
   
   The bigger the buffer, the smaller the risk. The current ratio shows the margin of safety available to cover the decline in the value of non-cash current assets when the assets are finally disposed of or liquidated.

3. **Liquid fund reserves**
   
   The current ratio is very relevant as a measure of the margin of safety against the uncertainty and shocks of a company's cash flows. Uncertainty and shocks, such as strikes and extraordinary losses, can temporarily and unexpectedly reduce cash flows.”

According to Subramanyam (2017: 143) "the current ratio can be calculated using the formula":

\[
\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}
\]

**Asset Structure**

According to Brigham & Houston (2014: 188) "proposes that the structure of assets is a
balance or comparison between fixed assets and total assets. Companies with sufficient assets to be used as collateral for loans tend to use more debt. General assets (assets) that can be used by many companies can be good collateral, while special purpose assets are not. Companies that have a large composition of tangible fixed assets will certainly have the opportunity to obtain additional capital with debt because these fixed assets can be used as collateral to obtain debt.

Thus it can be concluded that the structure of assets is the balance or comparison between fixed assets and total assets which can determine the amount of fund allocation for each component of assets.

According to Brigham & Houston (2014: 189) "asset structure can be calculated using the formula":

\[
\text{Asset Structure} = \frac{\text{Fixed Assets}}{\text{Total Assets}}
\]

**Debt To Equity Ratio (DER)**

According to Kasmir (2015: 157) the debt to equity ratio is the ratio used to assess debt and equity. This ratio is sought by comparing all debt, including current debt with all equity. According to Subramanyam (2017: 168) "proposed that to measure the relationship between total debt and total capital. The ratio of total debt to equity can be calculated using the debt to equity ratio:

\[
\text{DER} = \frac{\text{Total Debt}}{\text{Total Equity}}
\]

One of the company's ways to prosper shareholders is through maximizing share prices in order to obtain capital gains. Debt to equity ratio is a ratio that shows the results of the total assets used in the company.

The previous studies about relationship between current ratio and debt to equity ratio have significantly affected (Anggraini & Huda, 2020)(Watung, Saerang, & Tasik, 2016)(Ernawati & Roy, 2020)(Gani, 2020). However, other studies found that debt to equity ratio has not been affected by current ratio (Aditya & Santioso, 2020)(Sungkar & Deitiana, 2021).

The next independent variable is asset structures. The previous studies show that assets structure has significantly affected to debt to equity ratio (Aditya & Santioso, 2020)(Watung, Saerang, & Tasik, 2016)(Andika & Sedana, 2019). However, other studies have contrast
results such as asset structures does not affect to debt to equity ratio (Carnevela & Widyawati, 2017)(Praman & Damayanti, 2020)(Ernawati & Budiharjo, 2020)(Gani, 2020).

It can be seen that the results of all data analysis of the independent variables on the dependent variable data are very influential so that the variable of the Board of Commissioners can improve the Banking Financial Performance.

The formulation of the hypothesis that the researcher proposes is as follows:

H1: It is suspected that the current ratio has an effect on debt to equity ratio

H2: It is suspected that the assets structure has an effect on debt to equity ratio

H3: It is suspected that the current ratio and asset structure have effects on debt to equity ratio

Figure 2 Current Ratio and Asset Structure on Debt to Equity Ratio

Research Methods

This study uses secondary data in the form of company financial statements PT Aneka Tambang Tbk. The data used are from 2011 to 2020.

Table 2 Independent Variables (X) and Dependent Variable (Y)

<table>
<thead>
<tr>
<th>No.</th>
<th>Variables</th>
<th>Formulas</th>
</tr>
</thead>
</table>
| 1   | Current Ratio (X1) | \[
|     |                    | \frac{Current Assets}{Current Liabilities}\]   |
Technique analysis data uses multiple regression. Multiple regression should expect classic assumption such as normality, multicollinearity, autocorrelation, and heteroscedasticity.

Results and Discussions

Results

Table 3 Descriptive Statistics Current Ratio, Assets Structure, and Debt to Equity Ratio

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1</td>
<td>10</td>
<td>121.15</td>
<td>1064.23</td>
<td>274.93</td>
<td>281.50529</td>
</tr>
<tr>
<td>X2</td>
<td>10</td>
<td>40.08</td>
<td>74.61</td>
<td>65.78</td>
<td>10.13635</td>
</tr>
<tr>
<td>Y</td>
<td>10</td>
<td>41.12</td>
<td>84.79</td>
<td>64.32</td>
<td>11.32171</td>
</tr>
</tbody>
</table>

Source: Output SPSS 25

Based on table 3 above, it can be seen that the minimum value for the variable current ratio (CR) is 121.15%, the maximum value is 1,064.23%, the average value (mean) is 274.93% and the standard deviation is 281.51%. The minimum value of the asset structure (SA) is 40.08%, the maximum value is 74.61%, the average value (mean) is 65.79% and the standard deviation is 10.14%. Then for the minimum value of debt to equity ratio (DER) of 41.12%, the maximum value is 84.79%, the average value (mean) is at 64.32% and the standard deviation is at 11.32%.

Table 4 T-test in Multiple Regression

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
</tbody>
</table>

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Based on the table above, the following conclusions can be drawn:

a. Effect of Current Ratio (CR) on Debt To Equity Ratio (DER)

A significance value of 0.570 > a significant level of 0.05 and a tcount value of -0.595 < a ttable of 2.36462 means that the independent variable current ratio (CR) has no effect on the dependent variable Debt to Equity Ratio (DER).

b. Effect of Asset Structure on Debt To Equity Ratio (DER)

A significance value of 0.722 > a significant level of 0.05 and a tcount value of 0.370 < a ttable of 2.36462 means that the independent variable asset structure has no effect and on the dependent variable Debt To Equity Ratio (DER).

According to Ghozali (2013; 98) the F statistical test aims to determine the effect of all independent variables included in the regression model together on the dependent variable tested at a significant level of 0.05. The F test basically shows whether all the dependent variables in the regression model have a joint effect on the dependent variable. The decision making for the F statistical test is based on the following:

a. If the significance value is <0.05 and the Fcount value is > Ftable, it means that all the independent variables have a simultaneous effect on the dependent variable.

b. If the significance value is > 0.05 and the Fcount value is < Ftable, it means that all the independent variables have no effect simultaneously on the dependent variable.

To make a decision on the F test, first look for the Ftable value by using the following formula:

\[ \text{Ftable} = k; n-k \]

Information:
\( k \) = Number of independent variables
\( n \) = Number of data

Then the following results are obtained:

\( \text{Ftable} = (k; n-k) \)
\( \text{Ftable} = (2; 10-2) \)
\( \text{Ftable} = (2; 8) \)
Then look at the F distribution table for $F_{table}(2; 8) = 4.46$

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1,315</td>
<td>2</td>
<td>0.657</td>
<td>0.554</td>
<td>0.598</td>
</tr>
<tr>
<td>Residual</td>
<td>8,311</td>
<td>7</td>
<td>1,187</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>9,626</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Y  
b. Predictors: (Constant), X1, X2

Based on table 5 the results of the F anova statistical test above, it is known that a significance value of 0.598 > significant level of 0.05 and Fcount of 0.554 < Ftable of 4.46 it can be concluded that simultaneously the independent variables Current Ratio (CR) and Asset Structure are not effect on the dependent variable Debt To Equity Ratio (DER).

**Discussions**

Current Ratio (CR) increases 1% DER remains. Aset Structure increase 1% DER increase 0.89 %. This research is different from previous studies which show that between current ratio and debt to equity are significant (Anggraini & Huda, 2020)(Watung, Saerang, & Tasik, 2016)(Ernawati & Roy, 2020)(Gani, 2020). However, this study is similar to previous studies which is insignificant (Aditya & Santioso, 2020)(Sungkar & Deitiana, 2021).

Aset Structure incease 1% DER increase 0.89 %. This research is different from previous studies which is significant (Aditya & Santioso, 2020)(Watung, Saerang, & Tasik, 2016)(Andika & Sedana, 2019). However, this research is similar to previous studies which is insignificant (Carnevela & Widyawati, 2017)(Praman & Damayanti, 2020)(Ernawati & Budiharjo, 2020)(Gani, 2020).

**Conclusions**

This research can be concluded that current ratio is not significant to debt to equity ratio partially. Asset structure is not significant to debt to equity rasio partially. Current ratio and asset structure have not significantly affected debt to equity ratio simultaneously. The suggestion is that this research must use other data analysis software such as e-views.

**Acknowledgements**
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References


