Analysis Factor of Financial Distress: an Evidence of Cable Sub Sector in Indonesia From Year 2016-2017

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ABSTRACT

Every company’s goal is to maximize its profit, however, with the downturn in 2015 economy, many companies around the world including Cable subsector companies in Indonesia are wondering their future in 2016-2017, whether they can cope financially or at worst they can fall into financial distress. The purpose of this study is to analyze the factor affecting financial distress in the Cable Sub Sector in the Indonesia Stock Exchange. This method of the study is descriptive using quantitative data from cable sub-sector companies that are listed on the Indonesia Stock Exchange namely Sumi Indo Kabel (IKBI), Jembo Cable Company (JECC), KMI Wire and Cable (KBLI), Kabelindo Murni (KBLM), Supreme Cable Manufacturing and Commerce (SCOO), Voksel Electric (VOKS) with an observation period of 2 years, from 2016-2017. The variables of the study are solvability and liquidity as the independent variable and Financial Distress Altman model as dependent variables. Descriptive statistic, correlation, significant test, and regression are used in the analysis of the data. The results show that solvability ratio averaged above 30% minimum debt standard, the liquidity ratio is averaging above 1 which shows its ability to pay short term debt. And in terms of Financial Distress, Altman Model shows that companies are solvent since the result above the standard 1.81 given. The results showed that there was a significant relationship between Solvency and liquidity towards financial distress with a significant value of 0.000 < 0.05 using F-test. The result also shows that out of the two factors analyzed, liquidity is important for the regression model in explaining the variation of bankruptcy potential with significant value at 5%, and solvability is significant at 10%. Thus, the study suggests that the company need to evaluate and monitor its liquidity and debt level in order to avoid distress condition.

Keywords: Solvability, Liquidity, Financial Distress

INTRODUCTION

Every company’s goal is to maximize its profit. Thus, the company is expected to also increase its welfare and maximize the wealth of its owners and shareholders. However, the opposite can happen where companies cannot make a profit but face financial distress. Sometimes there are times when companies face a decline in their financial performance. The conditions mentioned are called financial distress (Beaver et al, 2011; Pucsek, 2013).
According to Sartono (2012), a manager must be able to know whether the company was in a healthy or unhealthy state. Unhealthy companies will fail quickly. As a result, bankruptcy hit the company. The analysis is needed that can predict the condition of the company going forward. Economic conditions in Indonesia that are still uncertain result in a high risk of a company experiencing bankruptcy. Error predictions in the future will be a fatal thing in the continuation of the company, prediction errors result in loss of income or investment that has been invested in a company. The importance of an analysis of the prediction of bankruptcy is very much needed by several related parties, such as investors, banks, the government and the main company itself. Correct predictions will also make the company know the financial condition of the company early.

A Bankruptcy of a company can be seen and measured from its financial statements. The financial statements are the basis for being able to interpret the financial condition and results of operations of a company.

Companies that experience financial difficulties generally experience a decline in growth, profitability, and fixed assets, as well as increases in inventory levels relative to healthy companies. Financial Distress is also characterized by delays in shipping, declining product quality, and delays in paying bills from banks. If the financial distress condition is known, it is expected that action can be taken to improve the situation so that the company will not enter the stage of more severe difficulties such as bankruptcy or liquidation. Financial difficulties (financial distress) begins when the company cannot meet the payment schedule or when cash flow projections indicate that the company will soon not be able to fulfill its obligations.

Governor of Bank Indonesia (BI), Agus Martowardjo, at the 2015 economic book launch event at BI Headquarters, Jakarta, stated that the situation at the global level had a negative impact on the Indonesian economy due to a number of structural problems in the domestic economy.

In Indonesia Stock Exchange there are various sectors of industry. One of them is a manufacturing Sector which comprises of various sub-sectors. In this study, research will examine parts of the manufacturing sector, namely the Cable sub-sector.

Are Cable companies able to cope with the situation of financial distress? What causes it, is it because of their liquidity issue or their solvability issue? This study uses liquidity ratios and solvency ratios to measure financial distress conditions that occur in manufacturing companies in the cable sub-sector.
Following Altman in 1968, many researchers developed methods or ways to predict the occurrence of financial distress such as Springate in 1978 and Zmijewski in 1984. (Sadgrove, 2005; Vickers, 2006; Pucsek, 2013). This study aims to determine the effect of solvency and liquidity on financial distress in the cable sub-sector listed on the Indonesia Stock Exchange in 2016-2017. Thus, based upon the description given above, this study then will look on ANALYSIS FACTOR OF FINANCIAL DISTRESS: AN EVIDENCE OF CABLE SUB SECTOR IN INDONESIA FROM YEAR 2016-2017

LITERATURE REVIEW

One of the important financial aspects to analyze in the financial statement is the liquidity ratio. This is because liquidity is one of the tools that can be used to measure the success of a company seen from how much the company's ability to meet the company's current liabilities (Atmasasmita, 2016; Fahmi, 2015; Hery, 2015). The benefits of liquidity ratios are from being a trigger tool for management to improve its performance, by looking at the current liquidity ratio (Kasmir, 2012: 132). Many factors must be considered and considered by managers in order to manage liquidity problems efficiently. Munawir (2002:93) explains that the factors that influence the level of liquidity, among others are the lack of good financial management in situations that can lead to the illiquid condition. There are several types of liquidity ratios that companies can use to measure a company's ability to fulfill its obligations, they are Current Ratio, Quick Ratio, Cash Ratio (Kasmir, 2013; Hery, 2015; Rangkuti, 2013).

According to Brigham and Houston (2013:134), the current ratio shows to what extent current liabilities are covered by assets expected to be converted into cash in the near future. Fahmi (2015:121) added that the current ratio can be used to measure short-term solvency, which is the ability of a company to meet debt needs when it falls due. Furthermore, Brigham and Houston (2013) explained that, if a company experiences financial difficulties, the company begins to slow down paying bills, bank loans, and other obligations that will increase current liabilities. If current liabilities rise faster than current assets, the current ratio will decrease, and this is a sign of a problem (p. 135). Therefore, it can be concluded that the current ratio is very useful to assess how well the company manages the company's current assets to be used to pay off the company's current liabilities so that the company can continue to operate the company well, also add certainty to creditors and investors. The higher the current percentage ratio means that the company is getting better.
Solvability ratio is a ratio that measures how much a company's assets are financed by debt and the company's ability to pay off the company's long-term debt along with its interest. (Kuswadi 2008; Kasmir, 2016).

Hery (2015: 164) provides several benefits from solvability ratios including 1. Knowing the company's total liability position to creditors, especially when compared to the number of assets or capital owned by the company.

From these explanations, the authors conclude that solvency ratios are useful and needed by parties directly related to the company, especially the owner of the company, where the owner can assess the ability of management as an agent in managing funds entrusted by the owner. On the other hand, the management can monitor the company's capital structure well, namely by looking at a comparison between the amount of debt and the amount of capital financing. For external parties, namely for shareholders or investors, they can assess how much the rate of return from the funds they have deposited (including dividends). And for creditors and suppliers to be able to assess how much the rate of return on the principal amount and the waste. (Hery, 2015).

Some types of solvency ratios that are often used to measure a company's ability to fulfill all company obligations are as follows: debt ratio, debt to equity ratio, time interest earned, cash flow coverage, long term debt, and cash flow adequacy. (Fahmi, 2015; Hery, 2015).

Therefore, it can be concluded that companies cannot always stand with their own capital. The company chooses to owe compared to issuing shares because control is in full hands. Debt owed by the company must be maintained and calculated as well as possible so that it remains at a level that is good for the company and creditors so as to provide comfort to the owner of the company or investor. It is not always a company that has a large debt level that poses a risk to the company, but with large debt can also be an opportunity for companies to generate high profits if used by the company efficiently and effectively. (Hery, 2015; Fahmi, 2014; Sujarweni, 2017).

Any company can experience financial difficulties in the level of financial distress. Even though the economy is stable, still some companies can also experience financial distress problems. (Sadgrove, 2005; Altman and Hotchins, 2006). Financial distress seen as a potentiality for bankruptcy and this experience will give concerns of various parties in the companies both internal and external, in which managers and employees investors and creditors have concerned (Brigham & Houston, 2010; Harahap, 2015). Financial distress surely gives a negative impression of the company performance in terms of their income ability (Sawir,
The hypothesis of the Study

Based on the background description of the problem above, the identification of the problems to be discussed in this study are as follows:

H1: There is a relationship between solvability and Financial Distress

The debt ratio is the ratio used to determine a company's level of debt. In other words, a large agreement from the company is financed by a loan or approved by a large company to support spending. Debt to Total Assets Ratio is one of the ratios used to measure the solvency level of a company. The level of solvency of the company is the company's ability to pay for the company's long-term obligations. A company is said to be a solvable means that the company has sufficient assets and wealth to pay its debts. This ratio shows the amount of total debt to the total assets owned by the company. This ratio is the percentage of funds provided by creditors for the company.

The debt ratio can mean bad in difficult economic situations and high-interest rates, where companies that have high debt ratios can experience financial problems, but as long as the economy is good and interest rates are low it can increase profits. High ratio values indicate an increase in risk to creditors in the form of the inability of the company to pay all its obligations. Hence, the company could fall into bankruptcy. Previous studies show that there is no significant relationship between the ratio of debt and financial difficulties (Hanifah, 2013; Husna & Adel, 2018; Gryglewicz, 2010). Gunathilaka (2014) suggesting that solvability tests do not significantly differentiate solvent and insolvent companies. On the other hand, Bardia (2012) suggest to increase the solvency position of the selected company and also to stay away from bankruptcy or financial distress. And in the latest research by Aisya et al (2017) shows that solvency is shown to have a significant impact on financial distress, as suggested by previous research (Rusaly (2016); Triwahyuningtias, 201; Thim, 2011; Yanti, 2018).

H2: There is a relationship between liquidity and Financial Distress

The level of company distress is often related to the company's ability to pay its debt. The higher the debt, the higher the risk that the company cannot pay the payment due and can thus face financial distress. Debt ratio is a solvency ratio that measures the ability of a company to pay its debt. Previous studies have shown that there is no significant relationship between solvency and financial distress (Husna & Adel, 2018). And Dissanayke et al (2017) suggest
that solvency is shown significant impact on financial distress, as suggested by previous research (Rusaly & Adila (2016); Triwahyuningtias, 2012).

H3: There is a relationship between solvability, liquidity and Financial Distress

The level of company distress is often related to the level of the company's debt and the company's ability to pay its current obligations. The current ratio is a liquidity ratio that measures the company's ability to pay current liabilities and debt to assets used to measure the level of debt that the company currently has. Previous studies have shown that there is no significant relationship between solvability and liquidity toward financial distress (Husna & Adel, 2018). Furthermore, in a recent study, Yanti (2018) suggests in here study that financial ratios capable of predicting financial distress. Aisyah et al, (2017) also show that leverage is significantly correlated to financial distress. The value of short-term solvency ratio, long term solvency ratio, and financial flexibility ratio haven’t significant effect on financial distress, while the value of budgetary solvency ratio and financial independence ratio have a significant effect on financial distress.

METHODS

This study uses panel data from six cable companies listed on the Indonesia Stock Exchange from 2016 to 2017. The data used are secondary data derived from the financial statements of the Cable Sub-Sector Manufacturing Company from 2016 to 2017. The sample used in this study is the population of 6 companies listed on the Indonesia Stock Exchange from the Cable Sub Sector namely Sumi Indo Kabel (IKBI), Jembo Cable Company (JECC), KMI Wire and Cable (KBLI), Kabelindo Murni (KBLM), Supreme Cable Manufacturing and Commerce (SCOOC), Voksel Electric (VOKS).

Analysis of the variables using the formula for:

1. Dependent Variable (Y)
   Altman model of financial distress are shown as follows:
   \[ Z = 1.2X1 + 1.4 X2 + 3.3 X3 + 0.6 X4 + 1.0 X5, \]
   with
   \[ X1 = \frac{NWC}{TA} \quad X2 = \frac{RE}{TA} \quad X3 = \frac{EBIT}{TA} \]
   \[ X4 = \frac{MVE}{TL} \quad X5 \text{ Sales/TA} \]

2. Independent Variable (X)
   1) Solvability, to measure the level of corporate debt and the standard specified for DTA is < 30% the author used Debt To Asset to measure the Solvability of the company.
2) Liquidity, to measure the company's ability to pay short-term liabilities and the standard specified for CR is > 1 the author used the Current Ratio to measure the Liquidity of the company.

The statistical analysis of the Cable companies is using Descriptive statistics. Mean, Standard Deviation, Minimum, and Maximum, Correlation Matrix, Regression analysis, F-test, t-test.

RESULTS

Descriptive Statistic

Table 1. Descriptive Statistics

<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>Altman</td>
<td>12</td>
<td>1.81</td>
<td>4.96</td>
<td>3.13</td>
<td>4.96</td>
</tr>
<tr>
<td>DTA</td>
<td>12</td>
<td>.19</td>
<td>.72</td>
<td>.45</td>
<td>.72</td>
</tr>
<tr>
<td>CR</td>
<td>12</td>
<td>1.06</td>
<td>5.49</td>
<td>2.19</td>
<td>5.49</td>
</tr>
</tbody>
</table>

Based on the table above the results show that the research variables have good average results. The average yield for debt to the asset is 45% which is above the standard <30% for minimum debt in Indonesia. The average current ratio yield is 2.19 which is above 1 which indicates that the Cable company is able to pay short-term obligations. On the other hand the Altman method also shows that the Cable subsector companies are solvent with the mean result of 3.13 above 2.99 standards given.

Correlational Analysis

Table 2. Correlation

<table>
<thead>
<tr>
<th></th>
<th>Altman</th>
<th>DTA</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Altman</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>1</td>
<td>-0.86</td>
<td>0.92</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>N</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>DTA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>-0.86</td>
<td>1</td>
<td>-0.8</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0</td>
<td>0</td>
<td>0.002</td>
</tr>
<tr>
<td>N</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>CR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>0.92</td>
<td>-0.8</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0</td>
<td>0</td>
<td>0.002</td>
</tr>
<tr>
<td>N</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
</tbody>
</table>
The table above explains that the debt is associated negatively with Altman bankruptcy potential model and the level of the company’s liquidity is associated positively with Altman distress model. Furthermore, the results suggest a negative association of debt to asset is associated with Altman distress model at 1% level of significance. It is worth mentioning that the correlation matrix has been considered as a limited analysis because it ignores the interrelationships among the variables.

Regression Model
For the first regression model using the Altman model of financial distress, the table below provides the results of the hypothesis testing. It shows that the coefficient of determination (R2) for Altman is equal to 89 percent. The adjusted R2 is 86%. The table also shows that the model is significant with F-test 12.58 with a p-value 0.002 < 0.05.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Expected Sign</th>
<th>Coefficient</th>
<th>t-ratio</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>+</td>
<td>3.12</td>
<td>4.24</td>
<td>.002</td>
</tr>
<tr>
<td>DTA</td>
<td></td>
<td>-2.10</td>
<td>-1.97</td>
<td>.080</td>
</tr>
<tr>
<td>CR</td>
<td></td>
<td>.44</td>
<td>3.35</td>
<td>.008</td>
</tr>
<tr>
<td>R2</td>
<td></td>
<td></td>
<td>0.89</td>
<td></td>
</tr>
<tr>
<td>Adj. R²</td>
<td></td>
<td></td>
<td>0.86</td>
<td></td>
</tr>
<tr>
<td>Model F-stat.</td>
<td></td>
<td>35.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>p-value</td>
<td></td>
<td></td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>No. of Observation</td>
<td></td>
<td>12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The largest t-statistics for the Altman is 3.35 (p-value < 0.05) which is for the liquidity variable with its ratio, Current Ratio. This indicates that CR is important for the model in term of explaining the variation in company Altman model bankruptcy potential with the regression model:

\[
\text{ALTMAN} = 3.12 - 2.10 \text{DTA} + 0.44 \text{CR}
\]

DISCUSSION
Altman's model explains how changes insolvency and liquidity affect financial distress. These interactions result in an Altman adjusted R2 of 86% with a significant test value of 0.002.
positive sign shows that the increase in liquidity and the increase in debt ratio could affect the possibility of the company’s distress which leads to the company’s potential to be bankrupt. Studies emerge such as Gryglewicz (2010) that corporate financial decision is eminent in solving this matter. Gunathilaka (2011) in his research in Sri Lanka pointed out that Altman has a predictive power of the company’s solvency. For a manager, liquidity of the company is essential since for certain project need immediate funding, the higher this value indicates that the company is far from distress. This is, in reality, is very essential and the manager must find ways to have a fund for their working capital. On the other hand, the use of debt indicates that the higher the risk of being distress as shown in the first model which is significant. This makes the manager rethink and manager the company’s debt well, and use the necessary debt to optimize the financial performance of the company and avoid getting distressed. This study is essential since many companies suffer from competition and must aware in their performance to manage the company’s well and avoid distress as shown in previous studies (Andre & Taqwa, 2014; Arini, 2010; Hidayat, 2013; Kurniasari, 2013; Rusaly & Adila, 2016; Triwahyuningtias, M, 2012; Yuanita, 2010; Utami, 2015; Fadilah, 2013, Listantri & Mudjiyanti, 2016; Afrinda, 2013; Gobenvy, 2014; Sumartini et al, 2014; Faradila & Yahya, 2016; Aisyah et al, 2017)

**Conclusion**

Based on the results of the investigation, conclusions can be made that the companies generally have manageable debt at an average of 45% with good liquidity average in 219%. The result also indicates that they are not in financial distress conditions based on Altman model. Furthermore, the result shows that for the Altman model, H1 is accepted at 0.10 and H2 is accepted at 0.05, and H3 is accepted that there is a significant effect between solvability and liquidity to Financial Distress. Thus for Altman model, the result concluded that there is a significant effect of solvability and liquidity to Financial distress with CR as the leading factor of cable company’s distress with regression model: \( \text{ALTMAN} = 3.12 - 2.10 \text{DTA} + 0.44\text{CR} \).

**Recommendation**

From the conclusions and discussion of the results of the study, the study suggests that the company need to evaluate and monitor its liquidity and debt level in order to avoid distress condition.
REFERENCES


