SOLVABILITY, LIQUIDITY ON FINANCIAL DISTRESS

(Case Study on Cable Sub Sector on IDX 2016-2017)

Darwin Simanjuntak
darsim2112@gmail.com
Universitas Esa Unggul

Francis M. Hutabarat, MBA Ph.D
fmhutabarat@unai.edu
Universitas Advent Indonesia

Abstract : The purpose of this study is to study the effect of solvency and liquidity on financial distress in the Cable Sub Sector in the Indonesia Stock Exchange. The population of this study is the Cable sub-sector company that is listed on the Indonesia Stock Exchange which is supported by 6 companies with an observation period of 2 years, namely in 2016-2017. The method used in this research is a descriptive method, with DTA, CR for independent variable and Altman model and Springate model for dependent variables. Descriptive analysis, significant test, regression linear analysis is used in the analysis data. The results showed that there was a significant relationship between Solvency and liquidity towards financial distress of Altman Model in the Cable Sub Sector in the Indonesia Stock Exchange seen a significant value of 0.000 <0.05.

Keyword: Solvability, Liquidity, Financial Distress

Introduction

One of the purposes of a company is to maximize its profit. By doing so, company is expected to improve also its welfare and maximize the wealth of its owners and shareholders. However, the opposite could happen where the company were not able to gain profit but face financial distress. Sometimes there are times where the company face a decrease in their financial performance. The condition stated is called financial distress (Sadgrove, 2005; Vickerz, 2006; Beaver et al, 2011; Pucsek, 2013).

According to Sartono (2012), a manager must be able to find out whether the company is headed 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 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. Using comparable financial statements, including data on changes that occur in the amount of rupiah, percentages, and trends, the analyst realizes that several ratios will individually help in analyzing and interpreting the financial position of a company (Munawir, 2012: 64).

Financial distress is the stage of the decline in financial conditions that occur in a company before the occurrence of bankruptcy or liquidation. A company can be categorized as experiencing financial distress or financial difficulties if the company shows a negative number on operating income, net income and book value of equity and the company merges (Brahmana, 2007).

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.

In year 2015 for instance, in Indonesia, there are companies that experiencing poor financial performance and moreover, almost bankrupt (Khumaini, 2015).

A case stated in Kompas (2018) reported that PT Unilever Indonesia Tbk (UNVR) officially sells spreads business assets. The sale has been approved by an extraordinary general shareholders meeting (EGM). UNVR shareholders approve the sale of spreads business assets that include intangible assets, namely the right to distribute products with the global trademark Frytol, Blue Band Master and Blue Band, as well as local trademarks Samin Oil and Blue Band Gold. UNVR also sells tangible assets such as production assets, equipment, supplies and merchandise and rents part of land and factories in Cikarang. So, the total value of the transaction reaches Rp 2.92 trillion.

Thus from the above case, it can be seen that Unilever wants to sell BLUE BAND because assets are not as desired.

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, the research will examine the various sub sectors of manufacturing sector, namely the Cable sub-sector.

Are Cable company able to cope with the situation of financial distress? What cause 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 researcher 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). Thus, based upon the description given above, this study then will look on **THE EFFECT OF SOLVABILITY AND LIQUIDITY ON FINANCIAL DISTRESS IN CABLE SECTOR SUB REGISTERED IN INDONESIA STOCK EXCHANGE.**

Significant of the Study

The uses of this study are significant for the authors, in gaining knowledge and the practical experience in doing research as well as in reading company's financial statements and analyzed their development. The study also significant for universities, in supporting the program held by the Conference committee as well as the increase of faculty potential in research. As additional information, the study can also be used as a decision-making tool for companies, investor and other readers.

Literature

One of the important financial aspects to analyse 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 illiquid condition. There are several types of liquidity ratios that companies can use to measure a company's ability to fulfil its obligations, they are: Current Ratio, Quick Ratio, Cash Ratio (Kasmir, 2013; Hery, 2015; Rangkuti, 2013).

According to Brigham and Houston (2013:134) 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 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 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) 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. (p. 164).

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 fulfil 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 owned 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 companies can experience financial difficulties to the level of financial distress. Even though the economy is stable, still some companies can also experiencing financial distress problems. (Sadgrove, 2005; Vickerz, 2006; Altman and Hotchins, 2006). Financial distress seen as 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 to (Husnan and Pudjiastuti, 2002; Brigham & Houston, 2010; Harahap, 2015). Financial distress sureley give negative impression for the company performance in terms of their income ability (Sawir, 2004; Brahmana, 2007). Some sees that liquidity problem also can be a sign of financial distress (Hanifah, 2013, Fahmi, 2014, Hery, 2015, Ida & Santono, 2011).

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

Debt Ratio is the ratio used to determine between the level of debt of a company. 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 study suggest that there is no significant relationship between debt ratio to financial distress (Hapsari & Evanny, 2012; Hanifah, 2013; Husna & Adel, 2018; Gryglewicz, 2010). Gunathilaka (2014) suggest that the solvency test does not discriminate solvent and insolvent firms meaningfully. The Altman's and Springate's Z-score models yield similar predictive power. On the other hand, Bardia (2012)

suggest for improving the solvency position of the selected companies and also to be stay away from bankruptcy or financial distress. And in recent research by Aisya et al, (2017) and Dissanayke et al (2017) suggest that solvency are **show significant impact** on financial distress, as suggest also by previous studies (Krisnayanti et al, 2014; Rusaly (2016); Triwahyuningtias, 2012; Widarjo, 2009; Andre, 2009; **Thim**, 2011; Yanti, 2018).

H2: There is a relationship between liquidity and Financial Distress

The level of company's distress is often related with the ability of company to pay its debt. The higher the debt give probability of the higher the risk that the company cannot pay its due payment and thus can face financial distress. Debt ratio is solvency ratio that measures the ability of company to pay its debt. Previous study suggest that there is no significant relationship between solvency and financial distress (Fauza, 2015; Husna & Adel, 2018). And in recent research Dissanayke et al (2017) suggest that solvency are show significant impact on financial distress, as suggest also by previous studies (Krisnayanti et al, 2014; Rusaly & Adila (2016); Triwahyuningtias, 2012; Widarjo, 2009; Andre, 2009).

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

The level of company's distress is often related to the debt level of company and the ability of company to pay its current obligation. Current ratio is liquidity ratio that measures the ability of company to pay its current liabilities and debt to asset is used to measure the level of debt the company currently have. Previous study suggest that there is no significant relationship between solvability and liquidity toward financial distress (Fauza, 2015; Husna & Adel, 2018). Furthermore, in recent study, Yanti (2018) suggest in here study that financial ratios capable to predicting financial distress. Aisya et al, (2017) also shows 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 significant effect on financial distress

Method of the Study

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 samples used in this study were 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 (SCOO), Voksel Electic (VOKS).

Analysis of the variables using formula for:

a) Dependent Variable (Y)
   Generally, companies with financial difficulties experience a decline in growth, profitability, and fixed assets, as well as increases in inventory levels relative to healthy companies. Altman model and Springate model of financial distress is shown as follows:
   1. Altman Model
      Z = 1.2X1 + 1.4 X2 + 3.3 X3 + 0.6 X4 + 1.0 X5, with
      X1 = NWC/TA X2 = RE/TA X3 = EBIT/TA
      X4 = MVE/TL X5 Sales/TA
   2. Springate Model
      S= 1.03X1 + 3.07X2 + 0.66 X3 + 0.4X4, with
      X1 = NWC/TA X2 = EBIT/TA X3 = EBT/CL X4 Sales/TA
b) Independent Variabel (X)
   1. Solvability, the formula used is Debt To Asset to measure the level of corporate debt and the standard specified for DTA is < 30%
   2. Liquidity , the formula used is the Current Ratio to measure the company's ability to pay short-term liabilities and the standard specified for CR is> 1,> 2

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

The economic model is used to develop a model of a company firm value. The variable proposed for the model includes the following functional equation:

$$ZSCORE_{it} = \beta 0 + \beta 1DTA + \beta 2CR + e_i + u_{it} \quad .... \ (1)$$
$$SSCORE_{it} = \beta 0 + \beta 1DTA + \beta 2CR + e_i + u_{it} \quad .... \ (1)$$

Where:
Yit =The financial distress of the company i year t with ZSCORE and SSCORE as its model
a = Constants
β 1β2 β3= Regression coefficient
DTAit= Solvability Liquidity of the company i year t
CRit= Liqudity of the company i year t

Result of the Study

Descriptive Statistic

Table 1. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Altman	12	1.81	4.96	3.13	4.96
Springate	12	.68	2.45	1.35	2.45
DTA	12	.19	.72	.45	.72
CR	12	1.06	5.49	2.19	5.49

Based on the table above the results show that the research variables have good average results. The average yield for DTA is 45% which is above the standard <30% for minimum debt in Indonesia. The average CR 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 springate method indicates that the mean result is 1.35 that shows that the Cable company is said to be solvent because it is above the standard, which is 0.862. Furthermore, the Altman method also shows that the Cable sub sector companies is solvent with mean result of 3.13 above 2.99 standard given.

Correlational Analysis

Table 2. Correlation

		Altman	Springate	DTA	CR
Altman	Pearson Correlation	1.00	.68	-.86	.92
	Sig. (2-tailed)		.015	.000	.000
	N	12	12	12	12
Springate	Pearson Correlation	.68	1.00	-.44	.59
	Sig. (2-tailed)	.015		.154	.045
	N	12	12	12	12
DTA	Pearson Correlation	-.86	-.44	1.00	.80
	Sig. (2-tailed)	.00	.154		.002
	N	12	12	12	12
CR	Pearson Correlation	.92	.59	-.80	1.00
	Sig. (2-tailed)	.000	.045	.002	
	N	12	12	12	12

Table above illustrates that the existence of debt is associated negatively with Springate and Altman bankruptcy potential model and the level of company's liquidity is associated positively with both Altman and Springate distress model. Furthermore, the results suggest a negative association of debt to asset is associated with Altman distress model at 1% level of significant. 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 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%. Table also shows that the model are significant with F-test 12.58 with a p-value 0.002 < 0.05.

Table 3. Regression Model 1

Model Summary

Variables	Expected Sign	Coefficient	t-ratio	p-value
(Constant)	+	3.12	4.24	.002
DTA		-2.10	-1.97	.080
CR		.44	3.35	.008
R2	0.89			
Adj. R^2	0.86			
Model F-stat.	35.38			
p-value	0.000			
No. of Observaion	12			

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

ALTMAN = 3.12 – 2.10 DTA + 0.44CR

For the second regression model using Springate financial distress model, 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%. Table also shows that the model are significant with F-test 12.58 with a p-value 0.002 < 0.05.

Table 4. Regression Model 2

Model Summary

Variables	Expected Sign	Coefficient	t-ratio	p-value
(Constant)	+	.79	.96	.361
DTA		.21	.18	.860
CR		.21	1.45	.180
R2	0.35			
Adj. R^2	0.20			
Model F-stat.	2.37			
p-value	0.149			
No. of Observaion	12			

The largest t-statistics for the Springate is 1.45, however the p-value > 0.05. This indicates that CR and DTA cannot explained the variation in company Springate model bankruptcy potential. The regression model:

SPRINGATE = 0.79 + .21 DTA + .21 CR

Discussion

There are two models given for financial distress, they are Altman and Springate. However, only the first model explains how changes in solvency and liquidity affect financial distress. These interactions result in an Altman adjusted R2 of 86% with a significant test value of 0.002. The 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 Srilanka pointed out that Altman and Springate have predictive power of the company's solvency. For 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 manager must find ways to have fund for their working capital. On the the other

the use of debt indicates that the higher the risk of being distress as shown in the first model which is significant. This make the manager to rethink and manager the company's debt well, and use the necessary debt to optimize the financial performance of the company and avoid getting distress. 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; Widarjo et al, 2009; Yuanita, 2010; Utami, 2015; Fadihlah, 2013, Listantri & Mudjiyanti, 2016; Afrinda, 2013; Gobenvy, 2014; Kristiana, 2012; Sumartini et al, 2014; Faradila & Yahya, 2016; Aisyah et al, 2017)

Conclusion

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. Based on the results of the investigation, conclusions can be made that the cable sub sector companies generally has manageable debt at average of 45% with good liquidity average in 219%. The result also indicates that they are not in financial distress condition based on Altman and Springate model. Furthermore, the result shows that for Altman model, H1 is accepted at 0.10 and H2 is accepted at 0.05, and H3 is accepted that there is significant effect between DTA and CR to Finan However, the hypothesis is not accepted for Springate Model for H1, H2 and H3. Thus for altman model, the result concluded that there is significant effect of DTA and CR to Financial distress with CR as the leading factor of cable company's distress and solvency with regression model: **ALTMAN = 3.12 – 2.10 DTA + 0.44CR.**

Recommendation

From the conclusions and discussion of the results of the research, the research suggest that the cable sub-sector companies listed on the Indonesia Stock Exchange look upon the factors of financial distress describe in Altman model with ratio consist of company's net working capital, company's retained earnings, company's ability to gain profit, company equity and liability structure and asset management ratio that need to be managed well by their management since these ratios can determine their distress level, based on Altman model. Further, significant result mean that the company need to evaluate and monitor their liquidity and debt level in order to avoid distress condition.

REFERENCES

[1] Aisyah, N. Nur, F. T. Kristanti & D. Zultilisna. (2017). Pengaruh Rasio Likuiditas, Rasio Aktivitas ,Rasio Profitabilitas , dan Rasio Leverage terhadap Financial Distress (Studi pada Perusahaan Tekstil Dan Garmen yang terdaftar

di Bursa Efek Indonesia tahun 2011-2015). *E-Proceeding of Management*: Vol.4, No.1 April 2017.

[2] Afrinda, N. (2013). *Analisis Pengaruh Likuiditas dan Solvabilitas terhadap profitabilitas pada perusahaan makanan dan minuman yang terdaftar di Bursa Efek Indonesia (BEI).* Skripsi. Universitas Sriwijaya.

[3] Andre, O. (2009). *Pengaruh Profitabilitas, Likuiditas dan Leverage Dalam Memprediksi Financial Distress (Studi Empiris Pada Perusahaan Aneka Industri yang Terdaftar di BEI).* Skripsi. Universitas Negeri Padang.

[4] Andre, O. & S. Taqwa. (2014). Pengaruh Profitabilitas, Likuiditas, dan Leverage Dalam Memprediksi Financial Distress (Studi Empiris Pada Perusahaan Aneka Industri yang Terdaftar di BEI Tahun 2006-2010). *Jurnal WRA*, Vol 2, No 1, April 2014.

[5] Arini, D. (2010). *Analisis Rasio Keuangan Untuk Memprediksi Kondisi Financial Distress Perusahaan Manufaktur yang Terdaftar di Bursa Efek Jakarta.* Skripsi. Universitas Muhammadiyah Surakarta.

[6] Atmasasmita, R. (2016) *Sisi Lain Akuntabilitas KPK dan Lembaga Penggiat Antikorupsi.* Jakarta: Gramedia Pustaka Utama.

[7] Bardia, S. C. (2012). Predicting Financial Distress and Evaluating Long-Term Solvency: An Empirical Study. *The IUP Journal of Accounting Research & Audit Practices,* Vol. XI, No. 1, January 2012, pp. 47-61.

[8] Beaver, W. H., Correia, M., and M. McNichols. (2011). *Financial Statement Analysis and the Prediction of Financial Distress*. Hannover, MA: now Publishers.

[9] Brahmana, R. (2007). Identifying financial distress condition in Indonesia manufacture industry. *Journal of accounting,* pp. 5-51

[10] Brigham, E. F. & J. Houston. (2013). *Dasar-Dasar Manajemen Keuagan.* Jakarta: Salemba Empat.

[11] Dissanayke, TDSH., Somathilake, HMDN., Madushanka, DMJ., Cooray NHK. (2017). Board Configuration on Financial Distress. *GSJ*: Vol, 5.

[12] Faradila, Y. & M. R. Yahya. (2016). Pengaruh Opini Audit, Financial Distress, dan Pertumbuhan Perusahaan Klien terhadap Auditor Switching (Studi pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Tahun 2010-2014). *Jurnal Ilmiah Mahasiswa Ekonomi Akuntansi* (JIMEKA)

[13] Gobenvy, O. (2014). *Pengaruh Profitabilitas, Financial Leverage dan Ukuran Perusahaan Terhadap Financial Distress pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Tahun 2009-2011*. Skripsi. Universitas Negeri Padang.

[14] Gryglewicz, S. (2010). A theory of corporate financial decisions with liquidity and solvency concerns. Journal of Financial Economics 99 (2011) 365–384.

[15] Gunathilaka, C. (2014). Financial Distress Prediction: A Comparative Study of Solvency Test and Z-Score Models with Reference to Sri Lanka. *The IUP Journal of Financial Risk Management,* Vol. XI No.3.

[16] Fadihlah, N. F. (2013). *Analisis Pengaruh Karakteristik Corporate Governance terhadap Kemungkinan Financial Distress.* Skripsi . Universitas Diponegoro.
[17] Fahmi, I. (2014). *Analisis Kinerja Keuangan*. Bandung: Penerbit Alfabeta.
[18] Fahmi, I. (2015). *Analisis Kinerja Keuangan*. Bandung: Penerbit Alfabeta.
[19] Fauza, R. (2015). *Pengaruh Likuiditas, Profitabilitas, dan Struktur Modal terhadap Financial Distress*. Universitas Pendidikan Indonesia.
[20] Hanifah, O. (2013). Pengaruh Struktur Corporate Governance dan Financial Indicators Terhadap Kondisi Financial Distress. *Jurnal Maksi Undip,* 25-53.
[21] Hapsari, I., and Evanny. (2012). Kekuatan Rasio Keuangan dalam Memprediksi Kondisi Financia; Distress Perusahaan Manufaktur di BEI. *JDM* Vol. 3, No. 2, 2012, pp: 101-109.
[22] Harahap, S.S. (2015). *Analisa Kritis atas Laporan Keuangan*. Jakarta: PT RajaGrafindo Persada.
[23] Hery. (2015) *Analisis Laporan Keuangan*. Jakarta: CAPS (Center for Academic Publishing Service).
[24] Hidayat, M. A. (2013). *Prediksi Financial Distress Perusahaan Manufaktur di Indonesia (Studi Empiris pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Periode 2008-2012).* Skripsi. Universitas Diponegoro.
[25] Husna, A. & J. F. Adel. (2018). *Pengaruh Current Ratio, Debt to Total Asset Ratio, Net Profit Margin, dan Total Asset Turnover Terhadap Financial Distress pada Perusahaan Manufaktur Yang Terdaftar di Bursa Efek Indonesia Periode 2015-2016*. Universitas Maritim Raja Ali Haji.
[26] Husnan, S., and E. Pudjiastuti. (2002). *Dasar-Dasar Manajemen Keuangan*. UPP AMP YKPM: Yogyakarta.
[27] Ida, & Santono, S. (2011). Analisis kebangkrutan dengan menggunakan metode springate. *Media Bisnis,* Maret 2011, Volume 3, No.1.
[28] Kasmir. (2012). *Analisis Laporan Keuangan.* Jakarta: Raja Grafindo Persada.
[29] Kasmir. (2013). *Analisis Laporan Keuangan.* Jakarta: Rajawali Press.
[30] Kasmir. (2016). *Analisis Laporan Kuangan.* Jakarta: Raja Grafindo Persada.
[31] Khumaini, M. A. (2015). *Puluhan Perusahaan di Karawang Alami Krisis*. [Online]. Available at: http://bogor.antaranews.com/berita/13340/puluhan-perusahaan-di-karawang-alami-krisis.
[32] Krisnayanti, A. P., N. Wayan and N. K. L. A. Merkusiwati. (2014). Pengaruh Mekanisme Corporate Governance, Likuiditas, Leverage , dan Ukuran Perusahaan pada Financial Distress. *E-Jurnal Akuntansi Universitas Udayana* 7.1 (2014):93-106 ISSN: 2302-8556.
[33] Kristiana, I. (2012). Pengaruh Ukuran Perusahaan, Profitabilitas, Likuiditas, Pertumbuhan Perusahaan Terhadap Opini Audit Going Concern pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia (BEI). *Berkala Ilmiah Mahasiswa Akuntansi,* Vol 1, No. 1, Januari 2012.

[34] Kurniasari, C. (2013). *Analisis Pengaruh Rasio Camel Dalam Memprediksi Financial Distress Perbankan Indonesia.* Skripsi. Universitas Diponegoro
[35] Kuswadi. (2008). *Memahami Rasio-Rasio Keuangan Bagi Orang Awam.* Jakarta: Elex Media Komputindo.
[36] Listantri, F. & R. Mudjiyanti. (2016). Analisis Pengaruh Financial Distress, Ukuran Perusahaan, Solvabilitas , dan Profitabilitas terhadap Penerimaan Opini Audit Going Concern. *Jurnal Manajemen dan Bisnis MEDIA EKONOMI* Volume XVI, No.1 Januari 2016.
[37] Munawir, S. (2002). *Analisis Laporan Keuangan*. Yogyakarta: Liberty.
[38] Pucsek, J. (2013). *Financial and accounting controlling*.
[39] Rangkuti, F. (2011). *SWOT Balance Scorecard.* Jakarta: Gramedia Pustaka.
[40] Rusaly & Adila. (2016). *Pengaruh Likuiditas dan Profitabilitas Terhadap Financial Distress pada Perusahaan Transportasi yang Terdaftar di Bursa Efek Indonesia (BEI) Tahun 2010-2014.* Skripsi. Universitas Hasanuddin.
[41] Sadgrove, K. (2005). *Complete Guide to Business Risk Management*. United Kingdom: Gower.
[42] Sawir, A. (2004). *Kebijakan Pendanaan dan Restrukturisasi Perusahaan.* Jakarta: PT Gramedia Pustaka Utama.
[43] Sujarweni, V. W. (2017). *Analisa Laporan Keuangan.* Yogyakarta: Graha Ilmu.
[44] Sumartini, N. Komang Ari & N. L. S. Widhiyani. (2014). Pengaruh Opini Audit, Solvabilitas, Ukuran Kap dan Laba Rugi pada Audit Report Lag. E-Jurnal Akuntansi Universitas Udayana 9.1 (2014) 392-409 ISSN: 2302-8556.
[45] Sutrisno. (*2012*). *Manajemen Keuangan Teori, Konsep dan Aplikasi (8 th ed.).* Yogyakarta: Ekonisia.
[46] Thim, C. L., Choong, Y. V. and C. S. Nee (2011). Factors Affecting Financial Distress. *Corporate Ownership & Control*, Vol. 8 Issue 4, 2011, pp.345-351.
[47] Triwahyuningtias, M. (2012). *Analisis Pengaruh Struktur Kepemilikan, Ukuran Dewan, Komisaris Independen, Likuiditas dan Leverage terhadap Terjadinya Konsisi Financial Distress.* Skripsi. Univeritas Diponegoro.
[48] Utami, M. (2015). *Pengaruh Aktivitas, Leverage, dan Pertumbuhan Perusahaan dalam Memprediksi Financial Distress. (Studi Empiris pada Perusahaan Manufaktur yang terdaftar di BEI Periode 2009-2012).* Skripsi. Universitas Negeri Padang.
[49] Vickers, F. (2006). *The Dynamic Small Business Managers*. [Online].
[50] Widarjo, Wahyu & D. Setiawan. (2009). Pengaruh Rasio Keuangan terhadap Kondisi Financial Distress Perusahaan Otomotif. *Jurnal Bisnis dan Akuntansi* Vol.11, No.2, Agustus 2009, pp.107-119.
[51] Yanti, R. D. (2018). Kemampuan Rasio Keuangan dalam Memprediksi Status Financial Distress Pemerintah Daerah Kabupaten dan Kota di Provinsi Sumatera Barat Periode 2012-2016. *Jurnal Akuntansi*, Vol, 6.
[52] Yuanita, I. (2010). *Prediksi Financial Distress dalam Industri Textile dan Garment (Bukti Empiris Di Bursa Efek Indonesia). Jurnal Akuntansi & Manajemen* Vol 5 No.1 Juni 2010 ISSN 1858-3687 pp. 101 – 119.