EFFECT OF CURRENT RATIO, DEBT TO ASSET RATIO, AND RETURN ON ASSETS ON FINANCIAL DISTRESS IN INDONESIA STOCK EXCHANGE

Dihin Septyanto[1]
Nadia Figrita Welandasari[2]

[1]Fakultas Ekonomi dan Bisnis Universitas Esa Unggul, Jakarta
[2]Fakultas Ekonomi dan Bisnis Universitas Esa Unggul, Jakarta

[1]**dihin.septyanto@esaunggul.ac.id**
[2]**nadiafigrita@gmail.com**

ABSTRACT

This study aims to determine the effect of Current Ratio, Debt to Asset Ratio, and Return on Assets on the Financial Distress Level (Z-Score Index) on textile and garment companies listed on the Indonesia Stock Exchange in 2014 – 2018.

The population is 17 textile and garment companies. The results showed the coefficient of determination in the study amounted to 89.5%, while the remaining 10.5% is explained by other variables outside the research not included in research that can affect the level of financial distress (Z-score index).

The results also showed that simultaneously Current Ratio, Debt to Asset, and Return on Assets significantly influence Financial Distress (Z-Score Index). Partially Current Ratio has a significant positive effect, meaning that each increase in the value of the current ratio then the magnitude of the Z-score index value also increases so that it will reduce the level of the company's financial distress. Debt to Asset Ratio has a significant negative effect, meaning that each increase in the value of debt to assets, the amount of Z-score index value will be reduced so that it will increase the level of financial distress of the company. Return on Assets has a significant positive effect on Financial Distress (Z-Score Index), meaning that every increase in the value of return on assets affects the amount of Z-score index value also increases so that it will reduce the level of financial distress of the company.

Keywords: Current Ratio, Debt to Asset Ratio, Return on Assets, Financial Distress, Altman Z-Score.

1. INTRODUCTION

In 2015, dozens of textile companies reported having financial difficulties, among them threatened to go bankrupt and some other companies have been declared bankrupt and closed. Financial difficulties are caused by a large number of salty textile products that enter the domestic and raw material price of import (Ilyas Istianur, 2015). Financial difficulties (financial distress) that lead to bankruptcy are not only experienced by small medium enterprises but also large companies such as PT. Panasia Filament Inti (PAFI) is one of the issuers of the textile and garment sub-sector that has been officially delisting by the Indonesian stock exchange. Delisting forcibly by the IDX because PAFI is not able to improve the financial condition of the company and has no clear business objectives.

Financial distress occurred before bankruptcy at a company. According to (Ramadhani and Lukviarman, 2009) to overcome or minimize the occurrence of bankruptcy in the company. One method used to measure the financial level of distress is to use the Altman Z-Score. According to research conducted (Gahar, 2016) on 20 companies LQ45 and 20 companies affected suspense policy until finally delisting, the method of the Altman Z-Score was able to outperform other methods in predicting the bankruptcy of the company. In previous research factors affecting the financial distress among others, the first factor is the current ratio represents the ratio of liquidity, according to the results of research conducted by (Khaliq, 2014) supported by (Revelation, 2018) current ratio significantly positive effect Financial Distress level (Z-score Index). The second factor is that debt to asset ratio represents a leverage ratio according to research results (Sari, 2018) debt to assets ratio has a positive and insignificant effect, unlike the research results (Rohmadini, 2018) that debt to asset ratio affects negative and significant levels of Financial Distress (Z-score Index). The third factor, return on asset represents the ratio of profitability According to the results of research conducted by (Rizqiyah, 2017) Significant positive effect on the Financial Distress level (Z-score Index).

2. RESEARCH METHODS

This study explains the Financial Distress level as dependent variables influenced by the Current Ratio, Debt to Asset Ratio, and Return on Asset as independent variables. The type of Data used in this study is quantitative Data. Quantitative data is a type of data that can be measured or calculated directly, which is the information or explanation expressed by number or form of numbers (Sugiyono, 2017).

The data source used by the researcher is secondary data. Secondary data is a data source that does not directly provide data to the data collector, such as by another person or document (Sugiyono, 2017). The population in this research is the entire company which is located in the textile and garment industry that go public and listings listed on the Indonesia Stock Exchange (IDX) in the research period of 2014 to 2018 which amounted to 17 companies. The sampling technique in research is purposive sampling, which is a sampling technique of data sources with certain consideration and not deviating from the characteristics of the specified sample (Sugiyono, 2017).

The sample selection criteria in this study are:
1. Textile and garment companies listed on the Indonesia Stock Exchange (IDX) during the period from 2014 to 2018.
2. Annual financial summary report published by the company and the Indonesian Stock exchange year 2014-2018 from IDX official website (http://www.idx.co.id) has complete financial data and market data in accordance with the research variables.

The number of textile and garment companies that meet the criticism in this study amounted to 16 companies with the period 2014-2018. The method of analysis used in this study is to conduct a quantitative analysis expressed by the numbers that are in the calculation using statistical methods assisted by the E-Views statistic Data processing program. The descriptive statistics on this study are viewed from the average, maximum, minimum, and standard deviation of one variable dependent as well as independent variables (Ghozali, 2013). Descriptive statistics describe the data into a clearer and more understandable information.

Testing of hypotheses in this study using the data panel's regression analysis methods. Regression analysis is used to know how dependent variables can be predicted through variables individually. The current regression that is used in this study is:

$$Yit = \beta_0 + \beta_1 X1_{it} + \beta_2 X2_{it} + \beta_3 X3_{it} + \varepsilon_{it}$$

Description:
Y_{it} = Financial Distress level (Z-Score Index)
b_0 = Constanta
β = regression coefficient
X1 = Current Ratio
X2 = Debt to Asset Ratio
X3 = Return on Asset
ε = Error Term
T = time
i = Company

Data panels are data collected cross section and at a certain time period. Since the data panel is a composite of data cross section and time series, the number of observations becomes very much.

According to (Gujarati, 2012) Classic assumption Test is not necessary in the analysis of data panel because the data panel can minimize the occurrence of bias, heterogeneity or autocorrelation problems that are likely to occur in the results of data analysis panel conducted. In addition, the panel data can provide more information, variations, and can improve the degree of freedom that can improve the efficiency of the model. But the purpose of testing this classic assumption is to provide reassurance that the regression equations gained have exactness in estimation, unbiased and consistent. The tests used were test normality, multicholonieritas tests, autocholineration tests, and heteroskedastisity tests.

Hypothesis Testing
Statistical test F (simultaneous test)
According to (Ghozali, 2013) The F-stastistic test essentially indicates whether all the free variables intended in the model have a simultaneous influence on the dependent variable. Testing was conducted using significance level 0.05 (α = 5%).
Partial test (T-Test)
According to (Ghozali, 2013) A stastistic test is essentially showing how far the influence of a single explanatory or independent variable is individually in describing the variation of the dependent variable. Testing was conducted using significance level 0.05 (α = 5%).
Coefficient of determination (R ^{2})
According to (Ghozali, 2013) Coefficient of determination (R ^{2}) At its core measures how far the ability of the model in describing the variation of dependent variables.

LIBRARY OVERVIEW
Financial distress is a condition in which the company has financial difficulties and is threatened bankrupt. In other words, financial distress is a condition in which the company has financial difficulties to fulfill its obligations. The occurrence of negative losses or profits is one of the marks of the company experiencing financial distress. If the financial distress occur continuously, it can bring a company to bankruptcy (Fahmi, 2016). According to Ramadhani and (Lukviarman, 2009) that financial difficulties (financial distress) is the

initial stage before the occurrence of bankruptcy or liquidity due to the decline in financial conditions. According to (Beaver, 2011) in (Rahmawati, 2015) The financial distress can also be defined as the inability of the company to pay the financial obligations that are due.

Altman was known as a pioneer in the bankruptcy theory with Z-Score. Z-Score is a multivariable equation used by Altman in order to predict the level of bankrupty. Altman used a statistical method called linear analysis, precisely is multiple linear analysis (MDA). Altman Research initially collects 22 corporate ratios that may be useful for predicting the financial distress. Out of these 22 ratios, tests are conducted to choose which ratios to use in creating models. Testing is done by looking at significant statistics and ratios, correlation between ratios, ratio prediction capabilities and also judgement of researchers themselves. The results of the ratio test choose five ratios that are considered best to be variable in the model. The selected ratios are:
1. Working Capital/Total Assets
2. Retained Earnings/Total Assets
3. EBIT/Total Assets
4. Market Value of Equity/Book Value of Debt
5. Sales/Total Assets

According to (Prihadi, 2012) The five ratios are incorporated into multiple linear analysis (MDA) analysis and produce the following models:

Z = 1, 2WC/TA + 1.4 RE/HE + 3.3 EBIT/TA + 0.6 MVE/BVD + 1.0 S/HE

The value of Z-Score will explain the financial condition of manufacturing companies that are divided into several levels, namely:
1. For the Z-Score value is smaller or equal to 1.88 (Z-Score = 1.88), means the company is experiencing financial difficulties and high risk.
2. When acquired Z-Score between 1.88 to 2.99 (1.88 < Z-Score > 2.99), the company is considered to be in the grey area. In this condition the company is experiencing financial problems which should be addressed with proper management handling. In the grey area it is possible that the company has been bankrupt and may not.
3. For Z-Score value greater than 2.99 (Z-Score > 2.99) gives the assessment that the company is in a very healthy state so the possibility of bankruptcy is very small.

Financial ratios

The analysis of financial ratios is an activity to compare the numbers in the financial statements by dividing one number by another number. Comparisons can be made between one component and another in one financial report or between the existing components of the financial statement. Then the comparing numbers can be numbers in a period or different period (cashmere, 2013).

Liquidity

The liquidity ratio or often referred to as the Working capital ratio is the ratio used to measure how storage the company is. In other words, the liquidity ratio is useful to know the company's ability to finance and fulfill obligations/debts when billed or due (cashmere, 2015). In this research the measurements used to calculate liquidity are:

Current ratio

A current ratio or current ratio is a ratio for measuring the company's ability to pay for immediate short-term or debt obligations that are immediately overdue when billed as a whole. The current ratio can also be said as a form to measure the level of safety (margin of safety) of company. From the ratio measurement results, if the ratio is low then it can be said that the company is less capital to pay the debt.

The formula used to measure the Current Ratio According to (cashmere, 2015) is:

$$\text{Current Ratio} = \frac{\text{Aktiva lancar (Current Assets)}}{\text{Utang lancar (Current Liabilities)}}$$

Leverage

Leverage Ratio or can also be called solvency ratio is the ratio used to measure the extent to which the company's assets are financed by debt. What is the burden of debt compared to its assets (cashmere, 2015), while according to (Hanafi, 2009) The leverage ratio is a ratio that measures the company's ability to fulfill its long-term obligations. Companies that are not solvable is a company whose total debt is greater than its total assets. In this research the measurements used to calculate Leverage or solvency ratios are:

Debt to Asset Ratio (DAR)

Debt to Asset Ratio is a ratio of debt used to measure the comparison of total debt to total assets. In other words, how much the company's assets are financed by debt or how much the company's debt affects the management of its assets (cashmere, 2015), if the measurement results, when the ratio is high, meaning that funding with debt is more and more difficult for the company to acquire additional loans because the company feared unable to cover its debts with its assets. Similarly, when the ratio is low, the smaller the company is in debt.

The formula used to calculate Debt to Asset Ratio according to (Bringham and Houston, 2014) is:

$$\text{Debt to Asset Ratio} = \frac{\text{Total Liabilities}}{\text{Total Asset}}$$

Profitability

Profitability is a ratio for assessing the company's ability to profit. This ratio also provides a measure of the effectiveness of a company's management. This is demonstrated by the profit generated from the sales and income from investments (cashmere, 2015).

Companies with a very high return on investment will use relatively little debt. Highly profitable companies do not need too much debt financing because high returns allow those companies to do most of their funding through internally generated funds (Brigham & Houston, 2013).

In this research the measurements used to calculate profitability are:

Return on Asset (ROA)

Return on Asset demonstrates the ability of the company by using all assets owned to generate profit after tax. This ratio is important for management to evaluate the effectiveness and efficiency of company management in managing all company assets. The larger the ROA, meaning the more efficient use of company assets or in other words with the same amount of assets can be generated a bigger profit, and vice versa.

The formula used to calculate Return On Asset according to (Brigham & Houston, 2013) is:

$$\text{Return on Assets} = \frac{\text{Earning After Tax}}{\text{Total Asset}}$$

Research hypothesis

Based on the background of the problem, the formulation of problems and conceptual frameworks, the hypothesis on this research is;

1. H_1: Suspected Current Ratio, Debt to Asset Ratio, and Return on Asset To the financial distress (Z-Score Index) level.

2. H_2: allegedly Current Ratio positively affects the level of financial distress (Z-Score Index)

3. H_3: Suspected Debt to Asset Ratio (DAR) negative effect on the level of financial distress (Z-Score Index).

4. H_4: Alleged Return on Asset is positively influential on the financial level distress (Z-Score Index).

Research Model
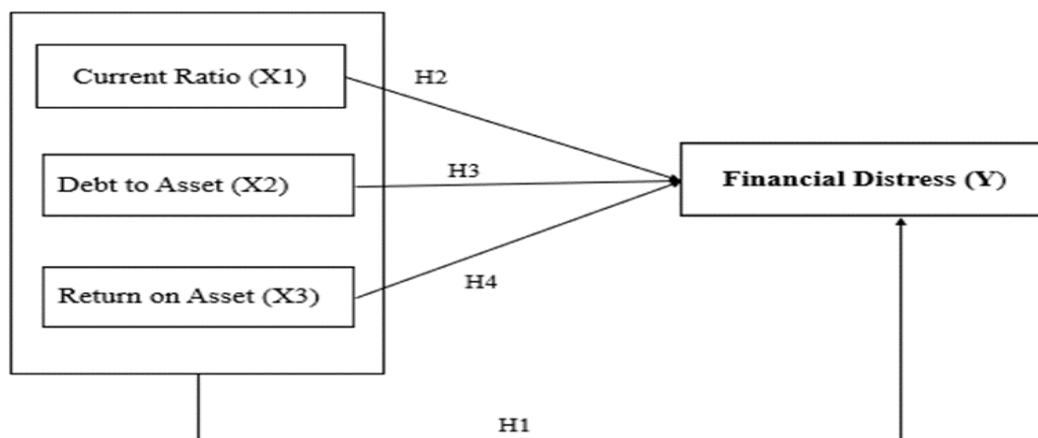
RESULTS AND DISCUSSION

In this research the initial amount of observation data is 80 observation obtained from 16 textile and garment companies listed on the Indonesia Stock Exchange in 2014-2018 but there are 5 observation data that is indicated outlier, so as to get the best regression result then in the research is done *outlier* of the data. The final number of observations used in the study was 75 observation data. The list of companies included in this research sample is as follows:

List of corporate name of textile and garment subsectors :

No.	Company Name	Company code
1.	Pt. Argo	ARGO
2.	Century Textile Industries Tbk	CNTX
3.	Eratex Djaya TBK	ERTX
4.	Ever Shine Tex Tbk	You 're

5.	Panasia Indo Resources TBK	PAFI
6.	Indo Rama Synthetic Tbk	INDR
7.	Asia Pacific Investama TBK	MYTX
8.	Pan Brother Tbk	PBRX
9.	Asia Pacific Fibers Tbk	POLY
10.	Pt. Risky	RICY
11.	Sri Rejeki Isman TBK	SRIL
12.	Sunson Textile Manufacturer Tbk	SSTM
13.	Star Petrochem Tbk	STAR
14.	Tifico Fiber Indonesia TBK	TFCO
15.	Trisula International TBK	TRIS
16.	Nusantara Inti Corpora Tbk	UNIT

Descriptive statistical test results

Date: 07/29/19   Time: 08:06
Sample: 2014 2018

	Z_SCORE	CR	DAR	ROA
Mean	0.175373	1.443613	0.917133	0.032320
Median	1.093000	1.081000	0.662000	0.003000
Maximum	5.813000	5.328000	5.073000	3.190000
Minimum	-16.59000	0.112000	0.085000	-0.290000
Std. Dev.	3.811411	1.244845	0.993032	0.379552
Skewness	-2.703840	1.386525	3.307580	7.806297
Kurtosis	11.71381	4.204115	13.50232	65.63511
Jarque-Bera	328.6671	28.56155	481.4348	13021.60
Probability	0.000000	0.000001	0.000000	0.000000
Sum	13.15300	108.2710	68.78500	2.424000
Sum Sq. Dev.	1074.987	114.6734	72.97233	10.66044
Observations	75	75	75	75

Source: The processing result of Eviews 10, 2019

According to the table above, there are information on the number of observations studied, average value (*mean*), maximum strong and minimum value, and deviation value of each variable. The results of the above statistical analysis can be concluded:

1. The results of the analysis using descriptive statistics on the *financial distress level* (*Z-Score index*) of 75 observation samples the textile and garment sector companies have an average value (*mean*) of 0.175373, a minimum value of-16.59000, a maximum value of 5.813000 and a standard deviation value of 3811411. The minimum value is owned by PT. Asia Pacific Fibers TBK in 2015, and the maximum value is owned by PT. Tifico Fiber Indonesia Tbk in year 2018.

2. The results of the analysis by using the descriptive statistics on the *current ratio* (CR) of 75 observation samples of the textile and garment sector companies have an average value (*mean*) of 1.1443613, a minimum value of 0.112000, maximum value of 5.328000, and a standard deviation value of 1.244845. The minimum value was by by Pt. Asia Pacific Fibers Tbk in 2017, and the maximum value is owned by Pt. Sri Rejeki Isman TBK in Tahun 2014.

3. The results of the analysis using the descriptive statistics on the *debt to asset ratio* (DAR) of the 75 observation samples of the textile and garment sector companies have an average value (*mean*) of 0.917133, a minimum value of 0.085000, the maximum value of 5.073000, and a standard deviation of 0.993032. The minimum value is owned by PT. Tifico

Fiber Indonesia TBK, and the maximum value is owned by PT. Asia Pacific Fibers,Tbk in 2017.

4. The results of the analysis using the descriptive statistics on *return on asset* (ROA) of 75 The observation samples of the textile and garment sector companies have an average value (*mean*) of 0.03232, the value of the value of 0.290000, the maximum amount is 3.190000, and the standard deviation of 0.379552. The minimum value is owned by PT. Asia Pacific Fibers TBK in 2014, and the maximum value is owned by PT. Asia Pacific Fibers TBK in year 2017.

Financial difficulties calculation Data (*financial distress)* by using Altman *Z-Score* method in textile and garment company listed on Indonesia Stock Exchange in 2014-2018 presented in the chart below:
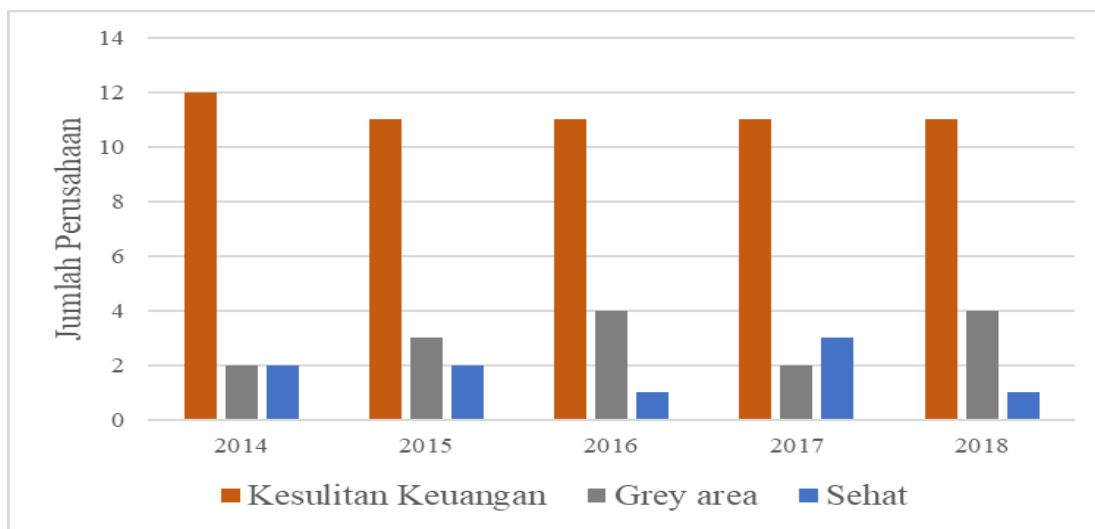
Source: (Processed data, 2019)

Based on the graph of the descriptive analysis of Z-Score and the categorizing of financial conditions on 16 textile and garment companies listed on the Indonesia Stock Exchange in 2014-2018 is as follows:

1. In 2014 there are 12 companies that are experiencing financial difficulties (*financial distress*), 2 companies are in the grey area or prone and 2 companies are in a healthy condition.

2. In 2015 there are 11 companies that are experiencing financial difficulties (*financial distress*), 3 companies are in the grey area or prone and 2 companies are in a healthy condition.

3. In 2016 there are 11 companies that have financial difficulties (*financial distress*), 4 companies are in the grey area or prone and 1 company is in healthy condition.

4. In 2017 there are 11 companies that are experiencing financial difficulties (*financial distress*), 2 companies are in the grey area or prone and 3 companies are in a healthy condition.

5. In 2018 there are 11 companies that have financial difficulties (financial distress), 4 companies are in the grey area or prone and 1 company is in healthy condition.

Regression Model Selection

Uji Chow

Redundant Fixed Effects Tests
Equation: FEM
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	14.766011	(15,56)	0.0000
Cross-section Chi-square	120.032536	15	0.0000

Source: The processing result of E-views 10, 2019

Based on the table results from Test *Chow* Unknown probability value is 0.0000. The probability value < (0.05) then the estimation model used is FEM.

Uji Hausman

Correlated Random Effects - Hausman Test
Equation: REM
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	1.829551	3	0.6085

Source: The processing result of E-views 10, 2019

Based on the results of the *Hausman* test Known probability value is 0.6085. The probability value > (0.05) then the estimation model used is REM.

Uji Langrage Multiply

Lagrange Multiplier Tests for Random Effects
Null hypotheses: No effects
Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided
     (all others) alternatives

| | Test Hypothesis | | |
	Cross-section	Time	Both
Breusch-Pagan	70.79885	1.804859	72.60371
	(0.0000)	(0.1791)	(0.0000)

Source: The processing result of E-views 10, 2019

Based on the results from test Langrage Multiplier known probability value of Breusch Pagan is 0.0000. The probability value < (0.05) then the best model used in the study is the *RANDM Effect model* (REM).

Double regression analysis of Data panels

Based on the test regression model selection has been obtained *Random Effect model* (REM) as the best model.

Double regression Data Panels

Dependent Variable: Z_SCORE
Method: Panel EGLS (Cross-section random effects)
Date: 07/29/19   Time: 07:50
Sample: 2014 2018
Periods included: 5
Cross-sections included: 16
Total panel (unbalanced) observations: 75
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.184572	0.366847	8.680935	0.0000
CR	0.300421	0.113125	2.655647	0.0098
DAR	-3.807749	0.205630	-18.51748	0.0000
ROA	3.005070	0.162065	18.54238	0.0000

Source: The processing result of E-views 10, 2019

Based on the table generates double regression equation of data panel as follows:

Y = 3,184572 + 0,300421CR – 3,807749DAR + 3,005070ROA

Based on multiple linear regression equations, the following interpretations of the regression equation model:
a. A constant of 3.184572 means that regardless of the independent variable, the financial value of *distress* (Z-Score) is 3.184572.
b. The coefficient of *current ratio* (X_1) is 0.300421 meaning each addition to the *current ratio* variable of 1 unit, assuming the other variables are considered constant, will increase the financial value of the *distress* (Z-Score) of 0.300421.
c. The coefficient of *debt to asset ratio* (X_2) is 3.807749 which means that each addition to the variable *debt to asset ratio* is 1 unit, assuming other variables are considered constant, will lower the financial value of *distress* (Z-Score) by 3.807749.
d. The coefficient of *return on asset ratio* (X_3) is 3.005070 meaning that each addition in the *return on asset ratio* variable of 1 unit, assuming the other variable is considered constant, will increase the financial value of *distress* (Z-Score) by 3.005070.

Hypothesis Test

The Statistic test F

Weighted Statistics			
R-squared	0.899182	Mean dependent var	0.039998
Adjusted R-squared	0.894922	S.D. dependent var	1.410239
S.E. of regression	0.457132	Sum squared resid	14.83686
F-statistic	211.0802	Durbin-Watson stat	1.722795
Prob(F-statistic)	0.000000		

Source: The processing result of E-views 10, 2019

Based on the figure of F-Calculate the calculated value of 211.0802 with a value of Probability 0.000000. From such data it can be concluded that the F-Statistic calculated > F-Statistic table and the probability value < 0.05 so that hypotheses are accepted and simultaneously the variable independent *current ratio, debt to asset ratio,* and *return on asset* have a significant influence on the *financial distress* level variable (Z-score index) and H_1 received.

Partial test result (t-Test)

Based on an image of the partial test result (T-Test) is known that:

1. **Testing H₂:** influence of *Current Ratio* to the *Financial Distress* level (Z-score index). Based on the table of the partial test result (t-Test) it is known that with the value of the probability variable *current ratio* $0.0098 < 0.05$ and regression coefficient of 0.300421 it can be concluded that the *current ratio* has a significant positive effect on the *financial distress* level (Z-score index) and hypothesis 2 received.

2. **Test H₃:** The influence of *Debt to Asset ratio* to the *Financial Distress* (Z-score index) level. Based on the table of the partial test result (T-Test) known Probabilities value of the variable *debt to asset* $0.0000 < 0.05$ and regression coefficient-3.807749 It can be concluded that *debt to asset ratio* has a significant negative effect on the *financial distress* level (Z-Score index) and 3 hypotheses received.

3. **Test H₄:** effect of *Return on Asset ratio* on the *Financial Distress* (Z-score index) level. Based on the table of the partial test result (T-Test) known Probabilities value of *return on asset ratio* $0.0000 < 0.05$ and regression coefficient 3.005070 It can be concluded that the *return on asset ratio* has a significant positive impact on the *financial distress* level (Z-Score index) and the 4 hypothesis is acceptable.

Test result Determinations (R^2)

Weighted Statistics			
R-squared	0.899182	Mean dependent var	0.039998
Adjusted R-squared	0.894922	S.D. dependent var	1.410239
S.E. of regression	0.457132	Sum squared resid	14.83686
F-statistic	211.0802	Durbin-Watson stat	1.722795
Prob(F-statistic)	0.000000		

Source: The processing result of E-views 10, 2019

Based on an image of the determination coefficient test results It is known that the adjusted value of R-square is 0.8949 or 0.895. The value indicates that *current Ratio, debt to asset ratio,* and *return on asset* are able to explain or provide information to the financial distress level (Z-score index) of 89.5% while the remaining 10.5% is explained by other variables outside the study which is not incorporated into the study that can affect the *financial distress* level (z-score index).

Discussion
Influence of *Current Ratio, Debt to asset,* and *Return on asset to Financial Distress level* (Z-Score index).

Current Ratio illustrates the ability of the company in paying a shortterm obligation or debt that is immediately due. If the company has a high *current ratio* then the company will be more *liquid* so that it can afford a short-term obligation in a smooth and timely manner, in other sense the company will be more spared from the threat of bankruptcy or financial difficulties because it has sufficient current assets to fulfill its debts and therefore affect the increasing value of the Z-score index. The larger the book Z-score Index then the *financial distress* level will decline or even be freed from the *financial distress*.

Debt to asset ratio measures how much of the debt a company uses to finance its investments/total assets, debt to asset ratio is one of the *leverage* ratios that explains the company's ability to resolve long-term obligations or debts. According to (cashmere, 2015)

from the results of the measurement the higher the ratio value then not good for the company means funding with debt more and more, it is increasingly difficult for the company to acquire additional loans because the company feared not able to cover the debts with its assets so that there is financial difficulties or *financial distress*. When the company has a high *debt to asset ratio* it will bring companies closer or even put the company in the financial condition *distress* so that it affects the decrease in the Z-score index value. The smaller the book Z-score Index then the *financial distress* level will increase.

Return on Asset demonstrates the ability of the company by using all assets owned to generate profit after tax. If a company can be well-efficient, the company is increasingly away from bankruptcy because it is able to maximize the revenue from the management of assets owned. Companies that have a value of *return on asset* High then the income received by the company enough to invest and pay a duty so that the company does not lack of funding or will reduce the risk of financial difficulties so it affects the rise of the Z-score index. The larger the book Z-score Index then the *financial distress* level will decline or even be freed from the *financial distress.*

So concurrently *Current Ratio, Debt to asset,* and *Return on asset* affect the *Financial Distress level (Z-Score index).*

Influence of *Current Ratio* (CR) to *Financial Distress* level (Z-Score index).

A current ratio or *current* ratio is a ratio for measuring the company's ability to pay for immediate short-term or debt obligations that are immediately overdue when billed as a whole. If the company has a *high current ratio* then the company will be more *liquid* so that it can afford a short term obligation in a smooth and timely manner, in other sense the company will be more spared from the threat of bankruptcy or financial difficulties because it has sufficient current assets to fulfill its debt and therefore reflected in the increasing rating on the Z-score index value and decreased risk *Financial distress* Conversely if the lower the liquidity then the lower the health of the company cause so that it is increasingly incapable of fulfilling its obligations or debts.

In textile and garment compannies composition of *current liabilities* or short-term obligation dominates the total liability as a whole. Be aware that the debt *Trust receipts* and the cost of operating debt are very large, whereas although the company has a considerable *inventories* apparently such *inventories* cannot be easily sold or used as cash because the absorption of the products in the market is not so good that the company does not have enough cash to pay a short term obligation so late and fail to pay debt occurs. The results of this research are in line with (Khaliq et al., 2014) and (rev, 2018) stating that current ratio is positive and significant.

Effect of DEBT to Asset Ratio (DAR) on the *Financial Distress* level (Z-Score index).

Debt to asset ratio measures how much debt a company uses to finance its investments/total assets. According to (cashmere, 2015) from the results of the measurement the higher the ratio value then not good for the company means funding with debt more and more, it is increasingly difficult for the company to obtain additional loans because the company feared not able to cover the debts with its assets so that there is financial difficulties or *financial distress*.

The use of large debts in the operation of textile and garment companies is dominated by rejuvenation, the purchase of advanced technology machines, the addition of new debts due to the increase of raw material costs and cover liabilities due to accumulation of losses in previous periods that are according to *trade off theory* The higher the debt, the

higher the bankruptcy load borne by the company. Adding debt increases the risk level of the company's revenue stream. The greater the debt, the greater the likelihood that the company could not afford to pay a fixed obligation in the form of interest and anyway.

(Brigham and Houston, 2010) in (Salalahi, 2018) explained that creditors were more interested in lower debt ratios, as the greater protection for creditors against a loss resulted in investors reluctant to invest because the company was judged at risk. When the company has a high *debt to asset ratio* it will bring companies closer or even put the company in the financial condition *distress* so that it is reflected in the decrease in the value of Z-score index. The results were in line with (Khaliq, 2014) and (Rohmadini, 2018) stating that debt to asset ratio was negatively and significantly influential.

The effect of *Return on Asset* (ROA) on the *Financial Distress* level (Z-Score index).

Return on Asset demonstrates the ability of the company by using all assets owned to generate profit after tax. If a company can be well-efficient, the company is increasingly away from bankruptcy because it is able to maximize the revenue from the management of assets owned.

In export-based textile and garment companies, despite being able to record profits, expensive standards and indirect costs such as import and lease costs are still a burden even the cost increase is not almost as large as the increase in the profit itself, while on the company that is oriented domestic market profit that was booked very small even more likely negative or losers is caused because textile and garment companies are increasingly losing market share in DOMESITK due to trade war Between the USA and China, causing China to export its products to Indonesia and the government does not limit it. The domestic market-oriented company was unable to compete and eventually lost due to very little sales. When the company losers, the company does not have cash to pay the obligation and divide the dividend, so that the companies have financial difficulties and fail to pay their debts/obligations.

Companies that have the value of *return on asset* High then the income received by the company sufficient for investment and pay obligations so that the company does not lack of funding or will reduce the risk of financial difficulties so it affects the rise of the Z-score index. The ability to generate high returns is also the consideration of investors to invest so that the company that is able to maintain a high *return on asset* is considered more profitable, with the number of investors who make the company get a bigger *cash inflow* . The larger the Z-score index value then the *financial distress* level will decline or even be freed from the *financial distress*. The results of this study are in line with (Septiana, 2019) stating that the significant *return on asset* is signified.

CONCLUSION
Inferred

Based on the data analysis and the discussion done, the conclusions gained in this study are:
1. The test results of F tests (simultaneous testing) with the *Random Effect Model* (REM) method show that all the free variables, namely *Current Ratio* (CR), *Debt to Asset Ratio* (DAR) and *Return on Asset* (ROA) have a significant effect on the *financial distress* (Z-score index) level of textile and garment companies listed on the Indonesia Stock Exchange in 2014-2018.

2. The *Current Ratio* variable (CR) is a positive and significant effect on the financial level of *stress* (Z-score index) of the company and garment listed on the Indonesia Stock Exchange year 2014-2018.
3. The variable *Debt to Asset Ratio* (DAR) affects negative and significant levels of the *financial distress* (Z-score index) of textile and garment companies listed on the Indonesia Stock Exchange in 2014-2018.
4. The *Return on Asset* (ROA) variable affects the negative and significant levels of the *financial distress* (Z-score index) on textile and garment companies listed on the Indonesia Stock Exchange in 2014-2018
5. Results of the coefficient of determination *current ratio, debt to asset ratio,* and r*eturn on asset* are able to explain or provide information to the *financial level distress* (Z-score index) of 89.5% while the remaining 10.5% is described by other variables not used in this study.

Advice

Based on the results and the discussion, you can give the following advice:

1. For the company

For the management of the company should pay attention to the *current ratio* of the company in order to remain in the position of good and increased which is maintained with current assets proportions and current liabilities, *debt to asset ratio* should be considered not too high and r*eturn on asset* should always be improved.

How to increase the current ratio, among others, is to sell fixed assets that tend to be passive to increase the activity of the company such as being transformed into deposits in the bank and conducting a massive collection of receivables smoothly so that the company avoids financial difficulties (*financial distress*).

If it is forced to increase debt, it is necessary to review the debt instrument which is the most precise of his mission between long-term loans in banks with interest risk or to issue new shares. When high debts that need to be considered again are the loan funds should be used as much as possible to improve profit that is optimal for example owed for expansion of emerging markets with large profit projections so that the company is spared from financial difficulties (*financial distress*).

Increase net revenue by increasing revenue from sales to key revenue sources and implementing cost efficiencies. Another way that can be alternative is the selection of the investment portfolio which is the lowest but the least risk.

2. For investors and creditors

Users of financial statements should collect all information regarding the company's condition is not limited to financial statements so as to make decisions based on technical and fundamental analysis that have the appropriate economic consequences and risks arising from such decisions can be minimized, including the risk of *financial distress* at the company.

Analyzing the company's financial condition deeply through technical and fundamental analysis e.g. using Altman Z-Score method as *screening* and consideration materials to analysis investment feasibility.

Choosing a company with a stable and high Z-Score value, has a high current ratio, has a relatively low debt ratio and has a good profitability ratio and continues to increase so that the return on investment invested can be more Guaranteed the paid certainty and as expected.

3. **For further research**

Further research should add more populations, samples and variables to be able to represent different types of corporate sectors and be able to explain the *financial condition distress* more broadly and comprehensively by increasing the research population in order not to focus on the manufacturing industry but in other industries such as *finance*, *mining* and *agriculture* which are also in the performance degradation phase.

It is expected to add external variables such as rates and interest rates, as well as add an internal variable for example, *Enterprise risk Management*, which addresses the risk handling that the company faced thoroughly.

REFERENCES

Almilia,L.S.,& Kristijadi.(2003). Financial ratios analysis to predict the Financial Distress condition of a registered manufacturing company at IDX. Journal of Accounting and Auditing of Indonesia 7, 183-206.

Altman. (1968). Traditional ratio analysis approach for predicting bankruptcy by using multivariate Descriminant Analysis.

Andre, O. (2013). The influence of profitability, liquidity and Leverage in predicting Financial Distress (empirical study at the IDX listed industrial companies). Management journal , pp 1-20.

Anggraini, R. (2017). Analysis of profitability, liquidity, Leverage, and inflation in predicting Financial Distress on Property and Real Estate companies listed on the Indonesia Stock Exchange. *USU Journal*

Apriliani. (2018). Analysis of factors influencing Financial Distress an agriculture company. Jurnal Institute of Agriculture Bogor 2018

Brigham, E. F., & F. Houston, J. (2014). The fundamentals *of Financial management Essentials of financial management* (Vol. Ed). Jakarta: Salemba Empat.

Desiyani, N. (2011). Analysis of the influence of macro and micro economic indicators on bankruptcy predictions. Case study of manufacturing Company at IDX year 2007-2009.   Thesis from Diponegoro University.

Fachrudin, K. A. (2008). *Corporate and Personal Financial difficulties.* Medan: USU Press.

Fahmi, I. (2013). *Analysis of financial statements.* Bandung: Alfabeta.

Gahar, Y. I. (2016). Analysis of the accuracy rate bancruptcy Prediction model between Altman Z-score, Ohlson O-score, and KMV model. 2015 – 2016.

Ginting, M. C. (2017). Influence of Current Ratio and Debt to Equity Ratio to Financial Distress in Property company Real Estate & in Indonesia Stock Exchange. Journal of *Management, 3*(2), 37-44.

Hanafi, M. (2009). *Analysis of financial statements.* Yogyakarta: UPP STIM YKPN.

Haq, S., Arfan, M., & Siswar, D. (2013). Financial ratios analysis in predicting Financial Distress (study on companies listed on the Indonesia Stock Exchange). Journal of *Accountancy, 2*(1), 37-46.

Harahap, S. S. (2013). *Critical Analysis of financial statements*. Jakarta: PT. Rajawali Grafindo Persada.

Jimming, L., & Weiwei, D. (2011). Empirical Study on the Corporate Financial Distress Prediction Based on Logistic Model: Evidence from China's Manufacturing Industry. *International Journal of Digital Content Tecnology and its Aplications, 5*(6).

Cashmere. (2015). *Analysis of financial statements*. Jakarta: Eagle Press.

Khaliq, A., Motawe Altarturi, B. H., Mohd Thas Thaker, H., Harun, M. Y., & Nahar, N. (2014). Identifying Financial Distress Firms: A Case Study of Malaysia' s Government Linked Companies (GLC). *International Journal of Economic, Finance and Management, 3(3),* 141–150.

Liana, D., & Sutrisno. (2014). Financial ratios analysis to predict the condition of Financial Distress Manufacturing company Jakarta. Journal of Management and Business Studies, 1 (1), 52 – 62.

Nurhidayah & Rizqiyah, F. (2017). "Financial performance in predicting Financial Distress". *Jibeka journal*, *Vol. 11, No. 1*, pp. 42-48.

Pustylnick, I. (2012). Restructing The Financial Characteristics of Projects in Financial Distress. *Global Jurnal of Bussiness Research*. *6*(2).

Putra, Y. A., & Sujana, E. (2017). The financial ratio analysis for predicting the condition of Distress Manufacturing Company listed on Indonesia Stock Exchange. Journal Accounting *Program S1, 8*(2).

Ramadhani, A. S., & Lukviarman, N. (2009). Comparison of bankruptcy analysis of the first Altman Model, Altman Revision, and Altman modifications to the size and age of the company as the explanatory variables (case studies at manufacturing companies listed on the Indonesia Stock Exchange). Siasat Business Journal, 13 (1), 15-28.

Rahmawati, A. I. (2015). Financial Ratio analysis to *financial Distress* conditions in manufacturing companies listed on Indonesia Stock Exchange year 2008-2013. *Diponegoro Journal of Accounting*.

Rohmadini. (2018). Pengaruh profitability, Liquidity and Leverage Terhadap Financial Distress Study on the *Food & Beverage* company listed on the Indonesia Stock Exchange period 2013-2016. *Journal of Business Administration* (JAB), *Vol. 61 No. 2*

Rezki, D.J.S. (2017). Factors affecting Financial Distress on Property and Real Estate companies open in Indonesia Stock Exchange. *University of North Sumatera.*

Rodini, A., & Ali, H. (2010). *Financial Management.* Jakarta: Partners.

Sari, S.P. (2018). Influence of liquidity, Leverage and profitability of Financial Distress in the Food and Baverage company listed on the Indonesia Stock Exchange year 2010-2016. University of *North Sumatera.*

Shahara, T. (2018). Bankruptcy prediction Company based on Altman Z-Score Model analysis on textile company listed on Indonesia Stock Exchange year 2011-2016. *University of North*Sumatera.

Sugiyono. (2013). *statistics for research.* Bandung: Alfabeta.

The Shahyunan. (2015). *Financial Management planning, analysis, and financial control.* Medan: USU Press.

Revelation, A. (2018). Factor analysis–Factors affecting the FINANCIAL DISTRESS of the company of Agriculture, *Bogor Agricultural Institute Journal 207 – 221*.

Yuliana, L. (2013). Analysis of financial distress of selected transportation companies on the Indonesian stock Exchange using Z-Score

Coverage 6, (2015), this causes 13 textile companies threatened to roll mats. Retrieved from https://www.liputan6.com/bisnis/read/2336827/this causes-13-company-textile-threatened-roll-mat.

Merdeka, (2013), if there is no response, IDX will force two delisting issuers. Retrieved from https://www.merdeka.com/uang/jika-tak-ada-respons-bei-akan-paksa-dua-emiten-delisting.html

Valid News, (2017), stagnation Indonesia in world textile pace. Retrieved from https://www.validnews.id/Stagnasi-Indonesia-dalam-Laju-Tekstil-Dunia--V0000710