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## Determinant of Financial Ratio Analysis to Financial Distress

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### **Abstract:**

In this new era bussines world is growing rapidly so that the emergence of many new companies. However, to be the market leader, the company must be able to manage the financial aspects well, so that the company does not have financial difficulties. The research aims to analyse the effects of liquidity ratios, activity ratios, profitability ratios, leverage ratios on the financial difficulties of textile and garment companies listed on the Indonesia Stock Exchange in the period 2018-2019. The object in this study used samples of 40 samples on textile and garment companies listed on the Indonesia Stock Exchange in the period 2018-2019 using sampling techniques purposive. The methods used in this study are some of the processed linear regression analyses using SPSS 25. Based on this study shows that liquidity is influential but not significant to the financial distress. The activity has significant effect on financial distress. Profitability has significant effect on financial distress. Leverage is influential but not significant to the financial distress.

**Keywords:** *Liquidity ratio; Activity ratio; Profitability ratio; Leverage ratio; Financial Distress*

Today's business world is growing rapidly resulting in many new companies emerging in an industry competing to become the market leader. However, to be a market leader, the company must be able to manage financial aspects well as a guarantee of long-term survival. The wrong management and not being careful can make the company closer to the financial problems. Company experiencing financial

distress if not immediately overcome by correct policy will result in bankruptcy.

Financial Ratio analysis can be one of the tools to predict financial difficulties (financial distress) used to measure the health of the company. Financial difficulty conditions (financial distress) occurred before bankruptcy. The unpreparedness of the company in predicting the financial distress is one of the causes of bankruptcy. Financial difficulties began when the

company was unable to fulfill the payment schedule or when the projection of cash flows indicated that the company would soon be unable to fulfill its obligations (Fachrudin, 2008:2). The financial distress condition is the decline in the financial condition of the company that occurred before the bankruptcy or liquidation (Widarjo and Setiawan, 2009). This financial difficulties prediction Model is expected to improve conditions before it comes to the stage of crisis. The financial ratios used in this study as a reference to predicting the financial distress are using liquidity ratios, profitability, leverage, activity and growth.

The difference in this research with previous research is that the company used as a research object is a textile and garment company. The selection of textile and garment companies as a research object is based on the reason that the economic crisis of the homeland is triggered by the high import of textile and garment production in the year 2019. Some challenges regarding imports, such as the price of Indonesian textile products are not competitive compared to imported products and import growth of fabrics that do not offset the export of garments. Therefore, this is also damaging the fabric, yarn and fiber industries, as well as the growth of domestic consumption taken by imports. BPS Data that processed by Kemenperin shows that in the period 2017 — 2019, the number of garment products imports reached US \$2.38 billion. In addition, in the same period there was an increase in the volume of imported carpets and other textile floor coverings with a trend of 25.2%. In 2017, import volume of

this product reached 21,907 tons, then at 2018 rose 31% to 28,706 tons, and at 2019 rose back by 19.7% to be 34,357 tons. The importing countries include China, Turkey, South Korea, and Japan. Furthermore, increased imports also occurred in Muslim fashion products. Hoods and scarves, for example, have a surge in imports since 2016 — 2018, from 7,000 tonnes to 12,000 tonnes.

On the other hand, not to be denied, the price of imported products is cheaper than local products. Therefore, to protect the domestic industry TPT, Kemenperin called for the rule of safeguard which is a kind of tariff import duty to the importation of TPT. "Kemenperin will provide protection through the implementation of safeguard for garment industry. This Safeguard we propose because there is an increase in imports in this sector in the last three years," explained the director general of Industrial Small, medium, and Aneka (IKMA) Kemenperin, Gati Wibawaningsih, through its description in Jakarta as reported by Antara.

"The high number of imports in this sector is something that must be addressed seriously by Kemenperin. This high import can close the potential of the domestic market because the imported products are relatively cheap," said Gati. This safeguard rule becomes very important considering the TPT industry has the potential to encourage the country's economy. This indicates that the company is unable to generate profit. One of the causes of profit drops is due to a reduced sales or decline. It will eventually exacerbate the condition that the textile and garment companies that are not closed will

likely have financial difficulties even failure in its efforts.

Financial distress is a broad concept consisting of several situations where a company is facing a problem of financial difficulties. Covering the Platt and Platt (2002) in Widhiari and Merkusiwati (2015) financial distress which is the process of declining the financial position of the company that was experienced before the company was bankrupt or liquidation. Wurck (1990) in Manurung (2012) defines the financial distress as a situation where cash flow cannot be fulfilled to pay the current obligation. Fallahpour (2004) in Kordestani, Biglari, and Bakhtiari (2011), stated that the financial distress occurred in the company whose profitability decreased. With the declining profitability, the company's ability to pay the underlying loan and interest from the loan will decline.

Liquidity can be used to predict the occurrence of financial distress. The liquidity ratio is a ratio that measures the company's ability to fulfill its overdue short-term obligations. The usual liquidity used in various studies is the current ratio. The Current ratio is a ratio that demonstrates the ability of the company to fulfill its short-term obligations by using current assets (Hendra, 2009:199).

Profitability is also one of the factors that can affect the financial distress. Profitability shows high scores can give the company signal in good condition and not experience the financial distress. Research conducted in Serbia shows that profitability has a significant effect on the financial distress (Raden, 2015). The results of this study differ from the research that in

Indonesia shows that profitability has no significant effect on the financial distress (pure, 2018).<sup>2</sup> In addition to liquidity, leverage and profitability, activities can also be a contributing factor to the financial distress. The management of the company cannot maximize the use of assets and sales is not maximal can bring the company closer to financial threat distress. Research conducted in Indonesia shows that the activity has a significant effect on the financial distress (Ariawan, 2017). The results of this research is different from that done in Indonesia shows that activity has no significant effect on the financial distress (ASSAGAF, Murwaningsari, Gunawan and Mayangsari, 2019).

This research was conducted on textile and garment companies listed on Indonesia Stock Exchange period 2016-2019. The textile and garment industry is currently facing a challenge while facing pressure amid globalization for free trade. The enforcement of a free trade agreement between Indonesia and some countries provides heavy enough pressure for the national textile industry, especially in the market. In addition, many competitors and various factors can make the company bankruptcy if it does not implement the right strategy. Based on the contradictory results of previous research the research will reexamine the Financial Distress prediction factor in Textile and Garment companies in Indonesia.

## **METHOD**

The type of research used in this study is quantitative research. The

population in this research is a textile and garment company listed on the Indonesia Stock Exchange in 2016-2019. The sample selection technique used in this study is the purposive sampling method and acquired 13 samples of 21 textile and garment companies listed on the Indonesia Stock Exchange in 2016-2019. The data analysis techniques used are statistical analyses including classical assumption trials, multiple linear regression, model feasibility testing, hypothesized testing and coefficient of determination test

### Variable Research and operational definitions

The variables in this study are:

- a. Bound variable (Y) financial distress
- b. Free variable (X) i.e. Liquidity ratio, Activity ratio, Profitability ratio, Leverage ratio

The operational definitions in this study can be described as follows :

- a. Financial Distress (Y)  
Financial Distress is a company conffilled experiencing financial difficulties and threatened bankrupt (Atmaja, 2008:258). In this research the company is stated to be in the financial condition distress measured using the interest coverage ratio as a measuring instrument in measuring the financial distress of a company (Latif and Triyanto, 2018). The interest coverage ratio compares the profit before interest and taxes with

the interest expense. Here's the indicator:

Interest coverage ratio :

$$\frac{\text{EBIT}}{\text{Interest expense}}$$

- b. Liquidity Ratio (X1)

Liquidity describes the company to pay the obligations that should be fulfilled immediately (Sutrisno,2013:222). Research on the liquidity ratio is measured using the current ratio. Current ratio is the comparison between the number of current assets with smooth debt (MUNAWIR,2012:72). Here's the indicator:

Current Ratio :

$$\frac{\text{Current assets}}{\text{Current debt}}$$

- c. Activity Ratio (X2)

The activity ratio shows the company's ability to effectively use assets (cashmere,2014:172). In this study the activity ratio was measured using the asset turnover ratio (Harahap,2011:308). This ratio is expressed as a comparison of sales or revenue with total assets. Here's the indicator:

Total Asset Turnover Ratio:

$$\frac{\text{Sales/Revenue}}{\text{Total assets}}$$

- d. Profitability Ratio (X3)

The profitability ratio is a ratio that shows the company's ability to generate profit in a given period (MUNAWIR, 2012:33). Profitability

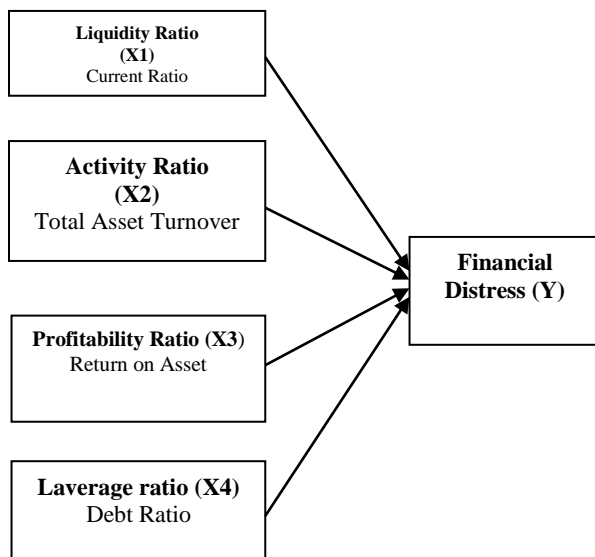
is stated by the term return on asset (cashmere, 2014:197). Return on asset (ROA) is measured by a comparison of net income after tax with total assets (cashmere, 2014:197). Here's the indicator:  
Return on Assets :

$$\frac{\text{EAT}}{\text{Total assets}}$$

c. Leverage Ratio (X4)

The ratio of the leverage showed that the company's funds were budget-funded (Sutrisno, 2013:224). In this study the ratio of leverage was measured using debt ratio. This ratio compares between the total debt companies has with the total assets (cashmere, 2014:151). Here's the indicator:  
Debt Ratio :

$$\frac{\text{Total debt}}{\text{Total Assets}}$$



**Picture 1. Hipotesa**

**RESULT**

**Classic Assumption Test  
Test Result Normality**

Test normality aims to test in a regression model, the interrupt variable or the residual has a normal distribution. This test uses the Kolmogrove Smirnov test. The test results can be seen in the table below:

**Tabel 1.  
Test Result Normality**

	<i>Unstandarized Residual</i>	Std.
<i>Asymp.Sig (2 tailed)</i>	009	0,05

The test results show Asymp. Sig. (2-tailed) (0.09) > 0.05. This means that the regression equation has normal spreads or variations of data.

**Multicollinearity Test Results**

Multicollinearity Test Results aims to test regression models found the correlation between the free variables. A good regression model does not occur in correlation between free variables. Detecting the presence or absence of multicollinearity in regression can be seen from the magnitude of tolerance and its opponent. If tolerance value > 0.10 and VIF < 10 Then there is multicollinearity. Multicollinearity test results can be seen in the table below:

**Tabel 2.  
Multicollinearity Test Results**

Variabel	Tolerance	Std.

Liquidity	Ratio	0,851	
Activity	Ratio	0,817	>0,1
Profitability	Ratio	0,763	
Lverage	Ratio	0,731	

Based on the calculation results in the table above, obtained the value tolerance liquidity variable 0.851, the value tolerance activity variable 0.817, the value of tolerance variable provitability 0.763 and the value tolerance Lverage 0.731 which all > 0.10. So the regression model on this research there is no multicollinearity between variables freely.

#### Heteroskedastisity Test Results

Heteroskedastisity Test Results are used to test the presence of heterokedastisity in research using Glejser test. There is no heterokedastisity known by seeing its significance against the degree of confidence 5%. Heterokedastisity test results with Glejser test can be shown in the following table:

**Tabel 3.**  
**Heteroskedastisity test Results**

Variabel	Sig.	Std.
LiquidityRatio	0,784	
ActivityRatio	0,530	>0,05.
ProfitabilityRatio	0,375	
Lverage Ratio	0.805	

Based on the table above shows that the probability value (Sig.) of each independent variable is 0.209 worth of liquidity, activity worth 0.989, profitability is worth 0.001, and leverage is worth 0.434. Can be declared this regression model does not occur heterokedastisity.

#### Autocorrelation Test Results

Autocorrelation Test Results aims to determine whether the correlation between

members of a series of observations is sorted by time or space, means that the outcome of a given year is influenced by the previous or subsequent year. The autocorrelation test results can be shown in the following table:

**Tabel 4.**  
**Autocorrelation Test Results**

Durbin-Watson	Std.
1.720	dU < DW < 4-dU

According to the table above, you can see Durbin-Watson value is 1,720. The value of Durbin-Watson resides in the dU area < 1,720 < 4-dU, so that the regression model can be summed up from the autocorrelation problem and is worth using.

#### Multiple Linear Regression Results

Values A and B  $b_1$ ,  $b_2$ ,  $b_3$  in a double linear regression test are:

**Tabel 5.**  
**Multiple Linear Regression Results**

Model	B
Constant	-163.566
LiquidityRatio	0,229
ActivityRatio	2.436
ProfitabilityRatio	-48.136
Lverage Ratio	-0,625

Based on the similarities are:

$$Y = -163.566 + 0.229Lik + 2.436Lev - 48.136Pro - 0.625Akt$$

#### Model Feasibility Test Results

The calculation of the  $F_{hitung}$  value is:

**Tabel 6.**  
**Model Feasibility Test Results**

$F_{hitung}$	$F_{tabel}$	Sig.	Std.
15.344	2.87	0.000 <sup>a</sup>	<0.05

Data analysis results have been obtained, then it can be known that the value  $F_{hitung}$  is charge of 15.344, because  $F_{hitung} > F_{tabel}$  (15.344 > 2,02) and significant 0.00 <

0,05 Then the model deserves use. This means that there is a significance influence between liquidity ratio, leverage ratio, profitability ratio and simultaneous activities ratio of financial distress.

### Hypothesis Test Results

**Tabel 7.**

#### Hypothesis Test Results

Hypothesis	t <sub>count</sub>	t <sub>table</sub>	Sig.	Std.
H1:LiquidityRatio	1.861	2.028	0.071	
H2:ActivityRatio	2.033	2.028	0.050	< 0.05
H3:ProfitabilityRatio	-6.546	-2.028	0.000	
H4:Laverage Ratio	-1.092	-2.028	0.282	

Value  $t_{table} < t_{hitung}$  (1.861 < 2.028) and value of significance  $0.071 > 0.05$  then H1 rejected. The liquidity variable can be concluded no effect on the financial distress. Value  $t_{table} < t_{hitung}$  (2.033 > 2.028) and value of significance  $0.05 > 0.05$  then H2 accepted. Inconclusive activity variables impact on financial distress. Value  $t_{table} < t_{hitung}$  (-6.546 < -2.028) and value of significance  $0.00 < 0.05$  then H3 accepted. Can be concluded there is significant influence of profitability on financial distress. Value  $t_{table} < t_{hitung}$  (-1.092 < -2.028) and value of significance  $0.28 < 0.05$  then H4 rejected. Can be concluded no significant effect of leverage on financial distress.

### Coefficient Test Result Determination

The Adjusted value of R Square (R<sup>2</sup>) amounted to 0595 or 59.5%. This means that liquidity variables, leverage, profitability and activities have an impact of 59.5% on the financial distress. The remaining 40.5% is influenced by other variables such as company size, good corporate governance, business risk, inflation, management policy and others.

## DISCUSSION

In the results of this research the liquidity variables measured using the CR (current ratio) show the results of the Sig. 0071 is greater than 0.05 which means it has no effect on the current ratio of CR (recent) to financial distress. The following can be concluded that companies having book CR (current ratio) large or small can experience financial distress. CR (current ratio) is increasing in the presence of elements of the low current assets of liquidity, e.g. increased preparations or accumulating. One of the reasons that make Variabeon the research results of the liquidity variables measured using CR (current ratio) shows the results of the Sig. 0071 is greater than 0.05 which means it has no effect on the current ratio of CR (the) of financial distress. The following can be concluded that companies having book CR (current ratio) large or small can experience financial distress. CR (current ratio) is increasing in the presence of elements of the low current assets of liquidity, e.g. increased preparations or accumulating. One reason that makes liquidity variable has no effect on the financial distress is the current property of the company used for the purpose of paying interest, paying debts, financing daily operations, so that the company is not effective in rotating the current property if it is protracted will cause financial distress. This research has been conducted by Nakhar Nur Aisyah (2017) and Hidayat and Meiranto (2014) with the results of the same research and in line. L Liquidity has no effect on the financial distress is the current property of the company used for the

purpose of paying interest, paying debts, financing daily operations, so the company is not effective in turning the current asset if it is protracted. This research has been conducted by Nakhar Nur Aisyah (2017) and Hidayat and Meiranto (2014) with the same and the same results of research.

The activity ratio variable that is measured by the total asset turnover ratio (TATTO) is getting the significance of the 0.05 equivalent to 0.05 which means the ratio of activity has an influence on financial distress. This indicates that if a company has a large or small amount of asset turnover, it can experience financial distress. If the higher asset turnover the more effective also the company's assets that produce sales, but that is worth noting is the expenditure to avoid the occurrence of financial distress, because some companies if the company Sudiono (2013).

The measured profitability ratio variable using (return on assets) ROA shows a significance result of 0.00 less than 0.05 which means that the profitability ratio has a significant influence on the financial distress. The ratio of profitability measured by the return on assets of ROA is a ratio that can measure the effectiveness and efficiency of the company's use in profit making, with the efficiency and effectiveness of an asset owned by the company can be more optimal in generating profit, has the adequacy of funds to charge the cost to run the business. With the fulfillment of the cost of the company to experience the financial distress very small. The results of this study were in line with the research of Saleh and Sudiyanto (2013). The variable leverage ratio measured by the DER (debt to asset

ratio) method resulting in a significance value of 0.28 less than 0.05 this indicates that the leverage ratio has no effect on the financial distress. The company does not require a lot of outside funds to run all operations, so it can minimize financial distress. Companies in research samples can carry out their operations without using outside funds including debts, the company also conducts overdue debt payments so that the company can maintain business continuity. The results of this study were in line with Choifina and Yuyetta (2015).

## CONCLUSION

The liquidity ratio, activity ratio, profitability ratio, and leverage ratio are condemned by Multiple linear regression and using IBM SPSS statistics 25 generates data that the liquidity is influential but not significant to the financial distress. The activity has significant effect on financial distress. Profitability is significant with the financial distress. Leverage is influential but not significant to the financial distress in textile and garment companies listed on the Indonesia Stock Exchange in 2016-2019.

## RECOMMENDATION

Based on the conclusion above, then in this research researchers are expected to increase the combination of different ratios and longer research periods so as to develop this research. It is also expected to add a sample of companies to be researched, such as using the company sector listed on the Indonesia Stock exchange in hopes of better earned results.



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