

FINANCIAL RATIOS AND FINANCIAL DISTRESS IN RETAIL TRADE SECTOR COMPANIES

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ABSTRACT

The purpose of this study is to examine and explain the effect of the current ratio, return on asset, debt to asset ratio, and total assets turnover to financial distress in the retail trade sub sector for the 2015-2018 period both partially and simultaneously. The research population is all retail trade sector companies listed in Indonesia Stock Exchange (IDX). Sample was selected using the purposive sampling method. The method of data analysis in the form of a quantitative analysis using multiple regression analysis. The results of the study revealed that partially the CR does not affect financial distress while the return on assets, debt to assets ratio and total assets turnover in partial effect on financial distress. Simultaneously, the CR, ROA, DAR and TATO affect the financial distress. This can be a concern for companies to pay more attention to these four elements so that companies avoid financial distress conditions as well as for investors who want to invest.

Keywords: debt to assets ratio; current ratio; financial distress; return on assets; total assets turnover

ABSTRAK

Tujuan dari penelitian ini adalah untuk menguji dan menjelaskan pengaruh current ratio, return on assets, debt to asset ratio, dan total assets turnover terhadap financial distress pada subsektor perdagangan eceran periode 2015-2018 baik secara parsial maupun simultan. Populasi penelitian ini adalah seluruh perusahaan sektor perdagangan eceran yang terdaftar di Bursa Efek Indonesia (BEI). Sampel dipilih dengan menggunakan metode purposive sampling. Metode analisis data berupa analisis kuantitatif dengan menggunakan analisis regresi berganda. Hasil penelitian mengungkapkan bahwa secara parsial CR tidak berpengaruh terhadap financial distress sedangkan return on assets, debt to assets ratio dan total assets turnover secara parsial berpengaruh terhadap financial distress. Secara simultan CR, ROA, DAR dan TATO berpengaruh terhadap financial distress. Hal ini dapat menjadi perhatian bagi perusahaan untuk lebih memperhatikan keempat unsur tersebut agar perusahaan terhindar dari kondisi financial distress serta bagi investor yang ingin berinvestasi.

Kata kunci: debt to assets ratio; current ratio; financial distress; return on assets; total assets turnover

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INTRODUCTION

Now the industrial civilization in the world has entered the 4.0 era. The industrial revolution 4.0 applies the concept of automation carried out by machines without requiring human labor in its application. The era of the industrial revolution 4.0 and later will involve work on the ability of science, technology, engineering and mathematics, internet of things, lifelong learning by 75% (Zimmerman, 2018). This 4.0 industrial revolution makes competition in the business world even stronger. This can affect the

development of the economy both nationally and internationally. With this increasingly strong competition, companies are also required to always strengthen management fundamentals so that later they will be able to compete with other companies. The company's inability to anticipate global developments by strengthening management fundamentals will result in a reduction in business volume which ultimately results in losses to the company's bankruptcy.

So that companies are required to always strengthen their fundamentals. Companies that experience bankruptcy will begin with the financial distress in the company. Financial distress is the stage of decline in financial conditions experienced by a company before bankruptcy. Financial distress prediction is not only applied in companies that have certain conditions, but also companies that have good or bad conditions, because the purpose of financial distress is as an early warning system so that companies can take action in avoiding and improving the financial system (Nindita, 2014)

One industry that is currently very much influenced by the development of the digital era is the retail industry in Indonesia. The number of online-based businesses has caused the retail industry to experience weakening purchasing power which has an impact on retail revenues. National retail sales in the January-June 2017 period slowed compared to the same year the previous year. In the Indonesian Retailers' Association (Aprindo) it was mentioned that the growth of retail industry sales throughout 2017 dropped 20 percent.

Figure 1 show the average annual profit (loss) of companies in the retail trade sub-sector each year experiences significant continuous losses. It is expected that retail trading sub-sector companies can continue to be careful Be careful in facing competition in the digital era or revolution 4.0 so as not to experience continuous losses and bankruptcy.

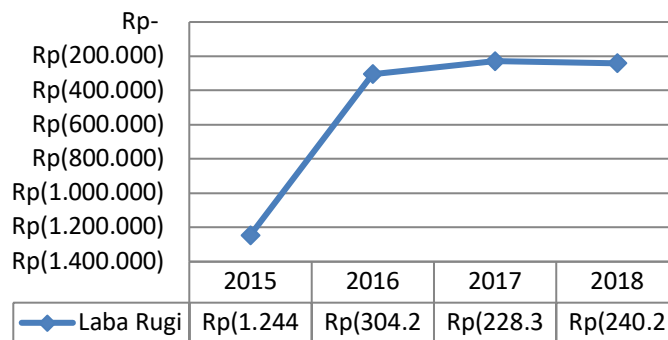


Figure 1. List of Average of Profit (Loss) of Retail Trade Sub-Sector (in million Rupiah)

Financial distress can be predicted by analyzing the company's financial ratios. Financial distress can be predicted by analyzing the company's financial ratios, namely the current ratio, return on assets, debt to assets ratio, total assets turnover (Kusanti & Andayani, 2015). Based on Figure 1 and Figure 2, we can see that there was a gap in 2016 where average years of profit (loss) increased to IDR -304.214 while the average yield per year of current ratio decreased to 2,30. In 2018 there was another gap where the average years of profit (loss) decreased to IDR -240.290, while the return on assets, debt to assets ratio and total assets turnover increased to reach -0,12; 5,27 and 5,16.

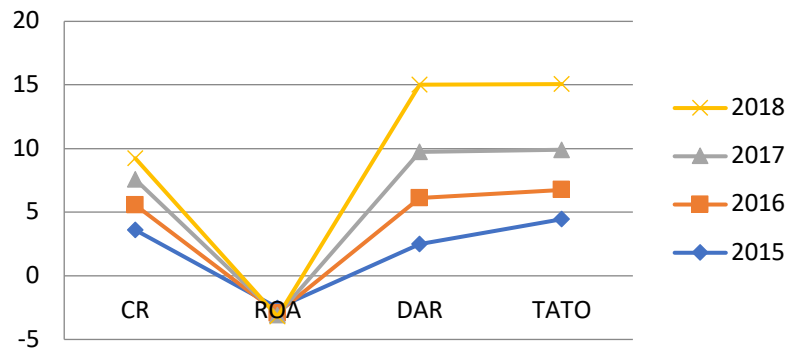


Figure 2. List of Average per Year CR, ROA, DAR and TATO of Retail Trade Sub-Sector Companies

It can be concluded that there is a gap between the phenomena that occurs and the existing theory. This trading sub-sector company in 2015–2018 experienced successive losses, but the average yield per year of current ratio, return on assets, debt to assets ratio and total assets turnover experienced increases and decreases which are not in accordance with existing theories. Based on this gap, in this study researchers used the current ratio, return on assets, debt to assets ratio and total assets turnover variables to prove how financial ratios can actually be used in predicting financial distress in a company.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Signaling Theory

Signaling theory is a theory that states that companies provide signals to users of financial reports, either in the form of positive signals (good news) or negative signals (bad news). Signal theory explains the reasons why firms present information for the capital market (Wolk et al., 2000). The information presented and disclosed by the company is important because it influences the investment decisions of capital owners or investors as well as other business actors such as creditors. This information is important for investors and business people because information essentially provides information, notes or images, both for the past, present and future conditions for the survival of the company and how it affects the company (Brigham et al, 2010).

According to Hendrianto (2012), the signaling theory on the topic of financial distress explains that if the financial condition and prospects are good, managers give a signal by carrying out liberal accounting. Conversely, if the company is in financial distress and has bad prospects, the manager gives a signal by holding conservative accounting.

Financial Distress

Some of the causes of financial distress according to Pramuditya (2014) are as follows: (1) Neoclassical model: Financial distress occurs when the allocation of resources is not appropriate. Estimating difficulties is done with balance sheet data and income statements; (2) Financial model: Financial distress is characterized by a faulty financial structure that causes liquidity constraints. This means that although the company can survive in the long term, it must also go bankrupt in the short term; (3) Corporate governance model: Financial distress according to the corporate governance model is when a company has the right asset structure and a good structure that is poorly managed.

Liquidity on Financial Distress

According to Kasmir (2016), liquidity ratios are ratios that illustrate a company's ability to pay short-term obligations. The liquidity ratio can be measured using the current ratio (CR). Research conducted by Dwiyanti (2016) proves that in this ratio will be known to what extent the company's current assets can be used to cover short-term liabilities or current debt. The greater the ratio of current assets to current debt, the higher the company's ability to cover its current debt obligations. The high current ratio can indicate the existence of excess cash which can mean two things, namely the amount of profits that have been obtained or the effect of not using the company's finances effectively to invest. If the company is able to fund and pay off its short-term obligations properly, the potential for the company to experience financial distress will be even smaller. Research conducted by Noviandri (2015), Ufo (2015), Dwiyanti (2016) and Rezeki (2017) explains that the current ratio affects financial distress, but differs in the studies of Mas'ud and Srengga (2014), Aisyah (2017) and Oktariyani (2019) which explain that the current ratio has no effect on financial distress.

H₁: liquidity affects financial distress in retail trading sub-sector companies

Profitability and Financial Distress

According to Syamsuddin (2016), profitability ratios are ratios that measure a company's ability to generate net income at a given level of sales, assets and share capital. This profitability ratio can be reflected in return on assets (ROA). This profitability ratio can measure financial distress because by showing the effectiveness of the use of company assets will reduce costs incurred by the company, the company will obtain savings and will have sufficient funds to run its business. With the adequacy of these funds, the possibility of companies experiencing financial distress in the future will be smaller (Andre, 2014). Research conducted by Gobenvy (2014), Andre (2014) and Aisyah (2017) explains that return on assets affects financial distress, but differs in Rezeki (2017) and Wulandari (2017) research which explains that return on assets has no effect on financial distress.

H₂: profitability affects financial distress in retail trading sub-sector companies

Solvency on Financial Distress

According to Syamsuddin (2016), solvency ratios are ratios that measure the extent to which a company's assets are financed by debt. The solvency ratio can measure financial distress by using a debt to assets ratio (DAR) as a proxy. This ratio is used to measure how much a company relies on debt to finance its assets. Research conducted by Utami (2015) proves that debt to assets ratio can show the proportion of company debt to total assets owned. Companies with many creditors will move more quickly towards financial distress, compared to companies with a single creditor. If a finance company uses more debt, this risks there will be difficulties in payments in the future due to greater debt than the assets owned. If this situation cannot be resolved properly, the potential for financial distress is even greater. Research conducted by Utami (2015), Ufo (2015), Dwiyanti (2016) and Ratnasari (2019) explained that debt to assets ratio influences financial distress, but differs in Aisyah (2017) and Stevannie (2019) research which explains that debt to assets ratio does not affect financial distress.

H₃: solvency influences financial distress in retail trading sub sector companies

Activities Ratio and Financial Distress

According to Kasmir (2016), activity ratio is a ratio that measures a company's effectiveness in using its assets. Activity ratios can be measured using total asset turnover (TATO). Research conducted by Noviandri (2015) proves that in this ratio, it can measure the turnover of all assets owned by the company and also measure how many sales are obtained from each rupiah of assets obtained. This can

show that if a company can manage its assets well and can rotate its assets well, the potential for a company to experience financial difficulties will be smaller.

Research conducted by Noviandri (2015), Stevannie (2019) explains that total asset turnover affects financial difficulties, but is different in Mas'ud and Srengga (2014) and Aisyah (2017) research which shows that total asset turnover no effect on financial difficulties.

H₄: activity influences financial distress in retail trading sub-sector companies

Liquidity, Profitability, Solvency, and Activities Ratios on Financial Distress

According to signaling theory (Wolk et al., 2000), a company can give signals to company management and shareholders through its financial statements whether it is a good signal or bad news. This signal can be seen from the financial ratios of the company's financial statements. This financial ratio analysis can predict the condition of a company's financial difficulties. Financial ratios consist of liquidity ratios, profitability ratios, solvency ratios and activity ratios so that these four ratios can predict the company's financial difficulties and can give a signal to shareholders.

H₅: Liquidity, Profitability, Solvency and Activities together affect the Financial Distress of Retail Trading Sub-Sector Companies.

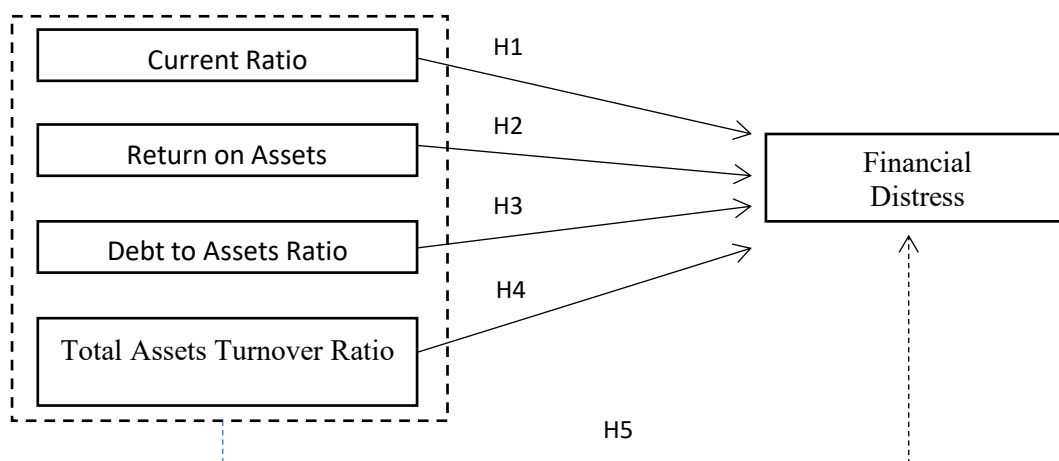


Figure 3. Research Framework

RESEARCH METHOD

This study is quantitative study conducted on retail trading companies that were listed on the IDX in 2015-2018. The population is all retail trading companies on IDX in 2015–2018 period. The sample technique is purposive sampling with criteria namely: (1) retail trade sub-sector companies listed on the Indonesia Stock Exchange (IDX) for the 2015–2018 period; (2) companies in the trade sub sector publish annual reports during the 2015-2018 period respectively; (3) companies in the trade sub-sector that experienced financial distress or bankruptcy for at least 2 consecutive years during the 2015–2018 period.

As for the independent variables, namely the financial ratio as proxied by the current ratio, return on assets, debt to assets ratio and total assets turnover with the dependent variable, namely financial distress. Here is formula for financial distress. This study uses secondary data in the form of annual report. The data analysis method is in the form of quantitative analysis using model suitability test, multiple regression analysis.

$$Y = \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \varepsilon_{it} \quad (1)$$

RESULTS AND DISCUSSION

Multiple Regression Test

This study uses multiple regression test because in the study used more than one independent variable. Following are the results of multiple regression tests conducted in this study.

Table 1. Multiple Regression Test Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CR	-0,001	0,122	-0,009	0,993
ROA	3,359	0,160	21,008	0,000
DAR	-3,063	0,139	-22,025	0,000
TATO	0,199	0,073	2,741	0,013
C	8,163	0,690	11,827	0,000

Following the results above, the regression model can be arranged as follows.

$$Z - \text{SCORE} = 8,163 - 0.001\text{CR} + 3,359\text{ROA} - 3.063\text{DAR} + 0.1993\text{TATO} \quad (2)$$

The multiple regression model above has the following interpretations: (1) constant value of 8,163, means that if all the independent variables namely CR, ROA, DAR and TATO are 0, then the Z-Score has a value of 8,163; (2) regression coefficient value of the CR variable is negative that is equal to -0,001 means that every increase of CR by one unit, it can cause a decrease in Z-Score of -0,001; (3) regression coefficient value of the ROA variable is positive in the amount of 3,359 means that each increase in ROA by one unit, it can result in an increase in Z-Score of 3,359; (4) regression coefficient value of the DAR variable is negative that is equal to -3,063 means that each increase in DAR by one unit, it can cause a decrease in Z-Score of -3,063; (5) regression coefficient value of the TATO variable is positive in the amount of 0,199 means that each increase in TATO by one unit, it can result in an increase in Z-Score of 0,199.

T test conduct to show how far an independent variable affects a dependent variable. Tests in the study were carried out using a significance level of 0,05 and 2-sided ($0,05 / 2 = 0,025$). The t-table value can be searched using the statistical table at the 0,025 significance with $df = n - k - 1$ or $32 - 4 - 1 = 27$ (k is the number of independent variables and n is the number of observations). Partial regression coefficient testing in this study are as follows

Table 2. t Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CR	-0,001	0,122	-0,009	0,993
ROA	3,359	0,160	21,008	0,000
DAR	-3,063	0,139	-22,025	0,000
TATO	0,199	0,073	2,741	0,013
C	8,163	0,690	11,827	0,000

Based on Table 2, it can be seen that the coefficient and probability value of current ratio > 0,05 is 0,9931. This shows that current ratio has no effect on the Company's Financial Distress, while the negative coefficient value and the probability of return on assets, debt to assets and total assets

turnover < 0,05, which are 0,0000, 0,0000 and 0,0126 this indicates that return on assets, debt to assets and total assets turnover have an effect on the Financial Distress of Sub Companies The Retail Trade Sector listed on the IDX for the 2015–2018 period.

F Test Result

The F test aims to examine the effect of 2 or more independent variables on the dependent variable simultaneously. If F-count is greater than F-table, it can be stated that the independent variables simultaneously influence the dependent variable. Testing in this study was carried out with a significance level of 0,05. F-table values can be found using statistical tables at the 0,05 significance with $df1 = k$ or $df1 = 3$ (k is the number of independent variables) and $df2 = n - k - 1$ or $df2 = 32 - 4 - 1 = 27$ (n is the number of observations). If the probability/significance value < 0,05, it can be stated that the independent variable simultaneously influences the dependent variable. The following are the results of the F test in this study.

Table 3. F Test Results

R-squared	0,998	Mean dependent var	-6,160
Adjusted R-squared	0,997	S.D. dependent var	24,623
S.E. of regression	1,484	Sum squared resid	44,034
F-statistic	821,229	Durbin-Watson stat	2,527
Prob(F-statistic)	0,000		

Based on the F test results above, it can be seen that the probability value is 0,000000 where $0,000000 < 0,05$, it can be concluded that H_5 is accepted, namely that CR, ROA, DAR and TATO simultaneously influence the financial distress.

Coefficient of Determination (R^2)

The coefficient of determination aims (R^2) to measure the ability of independent variables in explaining the variation of dependent variables. The value of R^2 which is getting closer to 1 means that the independent variables are increasingly able to explain the variation of the dependent variable. The following are the results of the coefficient of determination tests conducted in this study.

Table 4. Determination Coefficient Test Results

R-squared	0,998	Mean dependent var	-6,160
Adjusted R-squared	0,997	S.D. dependent var	24,623
S.E. of regression	1,484	Sum squared resid	44,034
F-statistic	821,229	Durbin-Watson stat	2,527
Prob(F-statistic)	0,000		

Based on the test results above, it can be seen that the R-squared value is 0,998 or 99,77%. This means that in this study the independent variables in this study namely CR, ROA, DAR and TATO can explain the dependent variable that is Financial Distress by 99,77% while the remaining 0,22% is explained by other variables not contained in the study this.

Effect of Liquidity on Financial Distress

Based on the results of the partial test above, it was found that liquidity, which was proxied by the current ratio (CR), had no effect on financial distress. This is because both retail trading companies that

have large and small current ratio values can experience financial distress. The results of the retail trading company's current assets turnover will be used to borrow or pay loans, pay interest costs, and finance day-to-day operations. Hence, when the retail trading company cannot be effective in turning its current assets around.

The liquidity ratio can be measured using the current ratio (CR). This ratio will determine the extent to which the company's current assets can be used to cover short-term liabilities or current liabilities. The greater the ratio of current assets to current liabilities, the higher the company's ability to cover its current liabilities. A high current ratio can indicate the presence of excess cash which can mean two things, namely the amount of profit that has been obtained or the result of not using the company's finances effectively to invest.

If the company is able to finance and pay off its short-term obligations properly, the potential for the company to experience financial distress will be smaller. However, in reality this current ratio does not show an influence on the occurrence of financial distress. The size of the current ratio does not indicate that current assets are actually used to pay off short-term loans. It could be that the current assets are used for other funding, such as financing operational activities. The results of this study are in line with Nakhar (2017), Rahayu & Sopian (2017) research as well as Perdana and Dillak (2019) which show that the current ratio does not significantly influence financial distress, but the results of this study are not in line with the research of Andre (2014), Noviandri (2015) also Dwiyantri (2016).

Effect of Profitability on Financial Distress

Based on the results of the partial test above, it was found that profitability, which is proxied by return on assets (ROA), has an effect on financial distress. This is because the profitability ratio, which is proxied by return on assets (ROA), is a ratio that measures the company's ability to earn or earn profits. If a retail trading company gets the total assets of its company effectively and efficiently, then the company can generate optimal profits. Thus, the retail trading company can finance the company properly, hence the possibility of financial distress.

This profitability ratio can measure financial distress because by showing the effectiveness of the use of company assets it will reduce costs incurred by the company, the company will get savings and will have sufficient funds to run its business. With sufficient funds, the possibility of the company experiencing financial distress in the future will be smaller. The results of this study are in line with the research of Mas'ud and Srengga (2014), Gobenvy (2015) as well as Aisyah (2017) which shows that return on assets has a significant effect on financial distress, but the results of this study are not in line with Wulandari's (2017) research also Rezeki (2017).

Effect of Solvency on Financial Distress

Based on the results of the partial test above, it was found that the solvency associated with debt to assets (DAR) had an effect on financial distress. This is because the solvency ratio proxied by debt to assets (DAR) is a ratio that measures how much a company relies on debt to finance its assets. If the retail trading company is able to produce output according to the target by being financed by its debt, then the company can finance the company properly, it is unlikely that financial distress will occur.

This ratio is used to measure how much the company relies on debt to finance its assets. This debt to assets ratio can show the proportion of the company's debt to its total assets. Companies with many creditors will move faster towards financial distress, compared to companies with single creditors. If a finance company uses debt more, this is at risk of difficulty in payment in the future due to debt that is greater than the assets owned. If this situation cannot be handled properly, the potential for financial distress will be even greater. The results of this study are in line with the research of Andre (2014), Utami (2015) as well as Ratnasari (2019) which shows that debt to assets has a significant effect on

financial distress, but the results of this study are not in line with the research of Aisyah (2017), Perdana and Dillak (2019) also Stevannie (2019).

Effects of Activities on Financial Distress

Based on the results of the partial test above, it was found that the activities associated with total assets turnover (TATO) had an effect on financial distress. This is because the activity ratio proxied by total assets turnover (TATO) is a ratio that measures the turnover of all assets owned by the company. If a retail trading company is able to manage its assets properly, then the company will be able to return cash to investors, so there is little chance of financial distress.

TATO can measure the turnover of all assets owned by the company and also measure how many sales are obtained from each rupiah of assets obtained. This can show that if the company is able to manage its assets well and can rotate its assets well, the potential for the company to experience financial distress will be smaller. The results of this study are in line with the research, Oktariyani (2019) as well as Ratnasari (2019) which shows that total assets turnover has a significant effect on financial distress, but the results of this study are not in line with Aisyah's (2017) research.

Effects of Liquidity, Profitability, Solvency and Activities on Financial Distress

Based on the test results above, it was found that Liquidity, Profitability, Solvency and Activity which is positioned with the current ratio (CR), return on assets (ROA), debt to assets ratio (DAR) and total asset turnover (TATO) simultaneously affect the Financial Distress in Retail Trading Sub-Sector Companies listed on the Indonesia Stock Exchange for the 2015-2018 Period. This can be a concern for companies to pay more attention to these four elements so that companies avoid financial distress as well as for investors who want to invest.

These four elements can affect a company's financial distress. Current ratio (CR) can predict the condition of financial distress, by looking at the company being able to pay its obligations in a timely manner. Return on assets (ROA) can also predict the condition of financial distress, by looking at positive comprehensive profits in a company. Debt to assets ratio (DAR) can also predict the condition of financial distress, by looking at debt smaller than the total assets of a company. And total assets turnover (TATO) can also predict the condition of financial distress, by looking at how much a company's net sales. The results of this study are in line with the research of Rezeki (2017) who found that current ratio (CR), return on assets (ROA) and debt to assets ratio (DAR) significantly influence Financial Distress. Research Ratnasari (2019) which found that current ratio (CR), debt to assets ratio (DAR) and total assets turnover (TATO) significantly influence financial distress.

CONCLUSION

Based on the results of data analysis and discussion that has been carried out regarding the Effects of Liquidity, Profitability, Solvency and Activities on Financial Distress in retail trade sub-sector companies listed on the IDX for the 2015-2018 period. That liquidity has no effect on the financial difficulties of retail trading sub-sector companies listed on the IDX for the 2015-2018 period, while profitability, solvency and activity have an effect on financial distress in retail trade sub-sector companies listed on the IDX for the 2015-2018 period.

This can be a concern for companies to pay more attention to these four elements so that companies avoid financial distress conditions as well as for investors who want to invest. These four elements can affect the financial distress of a company. The current ratio (CR) can predict the condition of financial distress, by looking at the company's ability to pay its obligations on time. Return on assets (ROA) can also predict financial distress conditions, by looking at the positive comprehensive income of

a company. Debt to assets ratio (DAR) can also predict financial distress conditions, by looking at debt that is smaller than the total assets of a company. And total assets turnover (TATO) can also predict financial distress conditions, by looking at how big a company's net sales are.

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