
Analysis Of The Effect Of Financial Performances And Macroeconomic Indicators To Financial Distress

Aninda Anggraeni¹, Dr. Denies Priantinah², Dr. Mohsin Shaikh³

¹Faculty, Department of Accountancy, Yogyakarta State University, Indonesia

²Faculty, Department of Accountancy, Yogyakarta State University, Indonesia

³Professor, ASM Institute of Professional Studies, Pune, India

Abstract

The current study investigates the effect of financial performances and macroeconomic indicators on financial distress predictions in real estate sector organisations on the Indonesia Stock Exchange during the period 2015-2017. This study used the Springate Model as a measurement of corporate financial distress and used logistic regression analysis. The results of the study found that: (1) Current ratio had a favorable effect on financial distress conditions, while the quick ratio had a unfavorable effect on financial distress conditions. (2) Net profit margin and return on assets of the two variables has a positive effect on financial distress conditions. (3) Debt ratio and debt to equity of the two variables does not affect the financial distress condition. (4) Macroeconomic indicators that are proxied by inflation, interest rates and exchange rates based on the results of the research of the three variables do not affect financial distress conditions.

Keywords: *Financial Distress, Financial Performance, Macroeconomic Indicators*

1. PROBLEMS BACKGROUND

The goals of the company is to increase shareholder wealth by increasing the value of the company (Brigham & Houston, 2010: 7). Increasing the value of the company can be seen from the increase in profits since company with high profit can provide dividends to shareholders and can maintain the sustainable company. However, according to Rudianto (2013: 251), a company does not always develop well as expected. In reality, many companies that had problems in management such as financial difficulties often lead to bankruptcy. Companies must be able to overcome various problems to sustain in business competition.

According to Saptarani (2016), the real estate industry is the sector that indicates the economic development of a country. Financial difficulties are also experienced by companies in the Real estate sector. This can be seen from the number of Real estate sector companies that suffered delisting. In 2011-2017, real estate organisations always had companies which

were delisted from the Indonesian Stock Exchange. Based on data on the Indonesia Stock Exchange, in 2011 New Century Development Tbk experienced delisting from the Indonesia Stock Exchange. In 2012 the company Surya Inti Permata Tbk also suffered delisting from the Indonesia Stock Exchange. In 2013 the Panca Wirasakti Tbk company experienced delisting from the Indonesia Stock Exchange. The latest real estate organisations that are experiencing latest delisting in 2017, are Ciputra Land Tbk and Ciputra Surya Tbk, due to merger with Ciputra Development Tbk. This indicates a high threat to the survival of the real estate organisations listed on the Indonesian Stock Exchange. Therefore, researchers are interested in researching real estate sector companies.

Definition of bankruptcy according to Brigham (2012: 2-3) is a failure that occurs in companies that can be interpreted by:

- 1) Economic Distressed, is the situation of a company losing money or a company's income is not able to recover its costs, which implies that the profit rate is less than the cost of capital or the present value of the organisations cash flow is less than the liability.
- 2) Financial Distress, is a condition of the company's difficulties in funds both in terms of funds cash or in terms of working capital.

Before going bankrupt, a company will experience financial distress (Ridwan: 2012). According to (Beaver et al., 2011) financial distress is defined as the inability of companies to pay financial obligations that have matured. According to Rudianto (2013: 252), the causes of financial distress are classified into internal factors and external factors. Internal factors of companies can be identified by financial health of the company. Ratio analysis can be used to analyse the financial health of the company (Sujarweni, 2013: 59). Financial ratios consist of several ratios, namely liquidity ratios, profitability, solvability, activity, growth, and valuation according to Kasmir (2014: 106).

The definition of liquidity is a description of the ability of a company to fulfil short-term obligations smoothly and on time so that liquidity is often referred to as short-term liquidity (Fahmi, 2012:59). Whereas, the external factors of the company are macroeconomic conditions with macroeconomic indicators, namely inflation, exchange rates and interest rates (Rudianto, 2013: 255). Mankiw (2007: 14) state that macroeconomics is the study of the economy as a whole, including income growth, price changes, and the unemployment rate.

According to Mukhtar, Rahmidiani, & Siwi (2016: 17), Inflation has a positive impact, which can drive a better economy and the negative effect of causing a sluggish economy. According to Ismail (2011: 132), the increase in interest rates will have an impact on increasing deposit interest which can attract people to save funds in the bank rather than investing, thus causing the capital to be obtained by the company from investors will decrease. The exchange rate according to Syarifuddin (2015: 1) will directly affect the economy of a country through the

price of goods exported and imported by a state. This will lead to an increase in the cost of raw materials for the company, which will reduce the level of profit of the company.

The prediction of financial distress can be made using a variety of prediction models. There are various financial distress prediction models of a company that have been used by previous researchers in predicting the state of financial distress of a company. According to Rudianto (2013: 253), the ability to predict financial distress will benefit many parties, especially creditors and investors. The bankruptcy prediction also serves to provide an overview for stockholders about the company's financial performance

One of the financial distress prediction models that can be used is the Springate model. The financial distress prediction model according to Springate (1978) predicts bankruptcy with an accuracy rate of 92.5%. This model was developed in 1978 by Gordon L.V. Springate. Gordon L.V. Springate (1978) conducted a study to find a model that could be used to predict the potential for bankruptcy. Springate (1978) uses 19 popular financial ratios used to predict financial distress. The sample used by Springate is 40 manufacturing companies located in Canada, which are 20 companies that are experiencing financial difficulties and 20 are in good health. Springate finally found four ratios that can be used to predict the potential bankruptcy of a company. Previous researchers have widely used this Springate financial distress prediction model. Research conducted by Safitri and Hartono (2014), Turmuddhy (2015), and Randy Kurnia Permana, Nurmala Ahmar and Syahril Djaddang (2017) concluded that the most accurate model is the Springate model compared to Altman, Ohlson, Zmijewski, and Grover models.

According to Rudianto (2013: 262), this Springate model profitability as the most influential component of bankruptcy. Also, the Springate model has an EBIT To Current Liabilities component, which is to see how much profit the company can pay for its debt (Randy Kurnia Permana, Nurmala Ahmar and Syahril Djaddang, 2017). This component is an essential component to see financial distress because this is one of them due to debt that cannot be repaid by the company.

The theory provides a positive signal and a negative signal for investors and creditors, the theory is called the signalling theory. Therefore, it is necessary to know about the influence of company internal factors (financial ratios) and external companies (macroeconomic indicators) on predictions of financial distress in real estate sector companies. This can provide a signal for the company regarding its financial condition so that it can immediately take action to save the company if predictions show that the company experiences financial distress.

Based on some previous studies regarding the variables of Liquidity, Profitability, Solvability Ratio, and Macroeconomic Indicators there are still several differences in the results of the study, the authors want to reexamine some of the variables that affect Financial Distress. In this study, Financial Distress is measured using the Springate financial distress prediction

model, the value of financial distress will be influenced by several variables mentioned above. This research was conducted at real estate sector company.

The research conducted by Muhammad Ilman, Adam Zakaria, and Marsellisa Nindito (2011) in the International Conference on Humanities and Social Science entitled "The Influence of Micro and Macro-Financial Toward Variables Distress of the Condition on Manufacture Companies Listed in Indonesia Stock Exchange in 2009". This research aims to ensure there is an influence between micro variables and macro variables. The population used in this study was 38 companies and used a sample of financial statements of 78 manufacturing companies. This study found that micro variables and macro variables simultaneously influence financial distress. Partially the liquidity ratio, leverage ratio and profit margin ratio partially have a significant effect on financial distress. Meanwhile, the variable inventory turnover ratio and macro variables, namely interest rates, inflation, CSPI did not significantly influence financial distress.

The research conducted by Wahyu Widarjo and Doddy Setiawan (2009) in the Business and Accounting Journal with the title "*Pengaruh Rasio Keuangan Terhadap Kondisi Financial Distress Perusahaan Otomotif*" aims to explain the effect of financial ratios on financial distress in the automotive industry. The sample used in this study were 49 non-financial distress companies and six distress companies. The results of this study indicate that the variables Current Ratio and Cash Ratio do not affect, while the Quick Ratio has a negative effect. Profitability and financial leverage variables do not affect financial distress.

Based on the descriptions that have been stated earlier, the formulation of the problem that the researcher will make is what is the effect of each variable financial performance and macroeconomic indicators partially to financial distress. While the the purpose of conducting the research is to Examine the effect of each variable financial performance and macroeconomic indicators partially to financial distress.

The results of this study are expected to provide the benefits for investors is expected to provide an illustration that the prediction of financial distress analysis can be influenced by financial ratios and macroeconomic indicators and can help investors to be able to see the most influential factors on financial distress in a company, so that investment decisions are getting better. Benefit for companies is expected to help provide an overview of the effect of macroeconomic indicators and financial performance on financial distress. This is very useful for companies to be able to prevent bankruptcy actually happening. The benefits for Academics and Researchers is expected to be a reference for other researchers who want to research financial distress and expected to provide knowledge about the effect of financial performance and macroeconomic indicators on financial distress predictions for the readers of this study, also expected to be used by other researchers as a comparison with previous studies on the effect of financial performance and macroeconomic indicators on financial distress.

2. RESEARCH METHOD

1. Types of Research

This study investigates the effect of macroeconomic indicators and financial performances on financial distress predictions. Based on the research objectives, this study can be categorized as causal research. It is a research that is used to determine the influence between hypothesized variables (Indriantoro and Supomo, 2014: 27). Also, based on the data used, this study can be categorized into descriptive research with a quantitative approach.

2. Research Populations and Samples

The population for the study comprised of all organisations included in the real estate industry which are listed on the Indonesian Stock Exchange. In the Indonesia Stock Exchange, there are 48 registered real estate sector companies. Purposive sampling method was used for the study. The sample criteria used by researchers were:

- a. Companies included in the real estate sector which are listed on the Indonesian Stock Exchange.
- b. Companies that issue financial statements for three consecutive years, namely 2015-2017.

Based on these criteria, a total of 45 Real estate sector companies that met the criteria were obtained.

Secondary data for the study was obtained from the company's financial statements for three consecutive years namely 2015-2017. The financial statements of the companies were obtained from the website of the Indonesia Stock Exchange i.e.: www.idx.co.id.

3. Data Analysis Techniques

The model used to determine the value of corporate financial distress uses the Springate Model. The following are the stages of analysis that were carried out by the researcher:

According to the Springate model variables, using the formula:

$$S = 103A + 307B + 066C + 04D$$

Where :

A = Working capital/total assets

B = Net profit before interest and taxes/total assets

C = Net profit before taxes/current liabilities

D = Sales/total assets

Based on the results of the calculation then classify the company whether it is in the prediction of bankruptcy or not. The cut-off value used is 0.862. If the logit regression value is above 0.862, the company is categorized as a healthy company, and if it is below 0.862, it is categorized as an unhealthy company and threatened with bankruptcy.

a. Descriptive Analysis

Descriptive analysis is used to determine the description or distribution of sample or population data using data seen from tables, frequency distributions, graphs, diagrams, pictograms, medians, means, and group variations through standard ranges and deviations.

b. Research Model

According to Ghozali (2013) prediction models that can be used in research are logistic regression analysis. The dependent variable in logistic regression is divided into two categories, namely category 1 (one) for companies that do not experience financial distress and category 0 (zero) for companies that experience financial distress.

c. Model Feasibility Test

As in the discriminant analysis model, logistic regression can also be done using the likelihood method. (Ghozali, 2013):

d. Testing the Hypothesis

Hypothesis testing is done by using logistic regression, i.e. the researcher wants to test whether the probability of the occurrence of the dependent variable can be predicted by the independent variable. The test results on t-statistics with a significance level $\alpha = 5\%$ are:

- a. If sig. $< \alpha$, then H_0 is rejected, and H_a is accepted. This means that there is a partial effect between the independent variables on the dependent variable.
- b. If sig. $\geq \alpha$, then H_0 is accepted, and H_a is rejected. This means that there is no partial effect between the independent variable and the dependent variable.

3. RESULT AND DISCUSSION

1. Research Description Data

Table 1. Sample Selection Process

Real Estate Companies listed on the IDX for the period 2015-2017.	48
Real Estate Companies that did not issue financial statements in 2015-2017.	(3)
Total of Sample	45

Based on these criteria, a total of 45 real estate sector companies that met the criteria were obtained. Companies that does not met the criteria were Armidian Karyatama Tbk, Forza Land Indonesia Tbk, and Eureka Prima Jakarta Tbk. In this study the companies that classified as a healthy companies were 46 companies, and the companies that classified as a financial distress companies were 89 companies.

2. Model Feasibility Test

a. Fit Model Test (-2LogLikelihood)

Table 2. Fit Block Model Test 0

Iteration	-2 Log likelihood	Coefficients
		Constant
1	174,511	-0,607
2	174,499	-0,627
3	174,499	-0,627

In this study the Likelihood Log -2 value in block 0 was 174.499 while the Likelihood Log -2 value in block 1 was 72.463. From the results, the Log Likelihood value of -2 in block 0 has decreased in block 1 which is equal to 102,036. We conclude that the model hypothesized is fit with data.

b. Coefficient of Determination (Cox and Snell's and Nagelkerke's R Square)

Table 3. Cox and Snell's and Nagelkerke's R Square Test

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	72,463 ^a	0,530	0,731

The value of Cox and Snell's R is 0.53 or 53%, and the value of Nagelkerke's R Square is 0.731 indicating the variability of the dependent variable which can be explained by the variability of the independent variable of 73.1%. Also, it is influenced by variables outside the study of 26.9% (100% - 73.1%).

c. Hosmer and Lemeshow's Goodness of Fit

Table 4. Hosmer and Lemeshow's Goodness of fit Test

Step	Chi-square	Df	Sig.
1	3,358	8	0,910

Based on the table shows that the magnitude of the Hosmer and Lemeshow Goodness of fit statistic value is 3.358 with a significant level of 0.91 because the value is above 0.05 then the fit model and model can be accepted.

3. Hypothesis Test

Table 5. Variables in the Equation

	B	S.E.	Wald	df	Sig.
X1	1,705	0,413	17,056	1	0,000
X2	-1,320	0,402	10,768	1	0,001
X3	5,716	2,411	5,619	1	0,018
X4	32,759	11,307	8,393	1	0,004
X5	6,474	7,444	0,756	1	0,384
X6	-1,639	2,331	0,494	1	0,482
X7	8,643	14461,450	0	1	1,000
X8	-0,146	723,038	0	1	1,000
X9	-0,011	24,636	0	1	1,000
Constant	117,493	292427,432	0	1	1,000

This hypothesis can be proven by looking at the Table of Variable in the Equation for each variable can be explained as follows:

a. Hypothesis 1

The test results state that Current Ratio (CR) has a positive effect on Financial Distress, with a value of B of 1.705 and a significant of 0,000 which is below 0.05. Based on these results, H1 is rejected which says that CR has a negative effect on financial distress. This indicate that if the company has a high percentage of CR, the company will increase the probability of financial distress. According to Munawir (2005: 72) a company with a high current ratio does not necessarily guarantee that it will be able to pay the corporate debt due to the proportion or distribution of unfavourable current assets, for example, the relatively high amount of inventory or difficult large accounts to be billed.

b. Hypothesis 2

The test results state that Quick Ratio (QR) has a negative effect on Financial Distress, with a B value of -1.32 and a significant of 0.001 which is below 0.05. Based on these results, we conclude that H2 is accepted which says that QR has a negative effect on financial distress. A company that has a high Quick Ratio will make the company more liquid and able to pay off short-term liabilities and operational costs of the company. The company's ability to pay off short-term obligations and operational costs shows the company's ability to carry out its operational activities properly so that the possibility of companies experiencing financial distress will be smaller.

c. Hypothesis 3

The test results state that Net Profit Margin (NPM) has a positive effect on Financial Distress, with a value of B of 5.716 and a significant of 0.018 which is below 0.05. Based on these results, we conclude that H3 is rejected which says that NPM has a negative effect on

financial distress. The higher the Net Profit Margin, the better the operation of a company. If this ratio is lower, it indicates that the company's operations are not good, so that it can threaten the health of the company.

d. Hypothesis 4

The test results state that return on assets (ROA) has a positive effect on financial distress, with a B value of 32.759 and a significant amount of 0.004 which is below 0.05. Based on these results, we conclude that H4 is rejected which says that ROA has a negative effect on financial distress. Return on Assets measures the ability of invested capital in all assets to generate net income. The greater the ROA owned by a company, the more efficient use of assets by the company to operate so that it will increase profits. If it gets lower, the company is less able to use its resources to generate profits, so that it can hinder the development of the company.

e. Hypothesis 5

The test results state that Debt Ratio (DR) does not affect the Financial Distress, with a B value of 6.474 and a significant value of 0.384 which is above 0.05. Based on these results, we conclude that H5 is rejected which says that the DR has a positive effect on financial distress. The Debt Ratio shows the portion of the total assets spent on debt. The smaller the ratio, the more secure (solvable). If the company has a large ratio, the company will experience difficulties in fulfilling its obligations. Based on this study, DR does not affect financial distress, so that large or small DR ratios cannot influence the probability of financial distress. Kasmir (2008: 153) the purpose of Debt Ratio is the measurement of a company's ability to fulfil long-term obligations so that this ratio cannot predict financial distress which tends to be a short-term prediction.

f. Hypothesis 6

The test results state that the Debt Equity Ratio (DER) does not affect the Financial Distress, with a B value of -1.639 and a significant of 0.482 which is above 0.05. Based on these results, we conclude that H6 is rejected which says that DER has a positive effect on financial distress. Based on this research, DER does not affect financial distress. According to Srengga (2012) debt that is proxied by DER is not able to predict financial distress of a company, because the company in obtaining funding sources will choose the risk that is small and will improve the management of the company so that it will get high profits.

g. Hypothesis 7

The test results state that inflation does not affect the Financial Distress, with a B value of 8.643 and a significance of 1 which is above 0.05. Based on these results, we conclude that H7 is rejected which says that inflation has a positive effect on financial distress. Based on this study, inflation does not affect financial distress. According to BI data, macroeconomic conditions in Indonesia during 2015-2017 were relatively stable so that these conditions did not affect the health of the company.

h. Hypothesis 8

The test results state that the Interest Rate does not affect the Financial Distress, with a B value of -0.146 and a significance of 1 which is above 0.05. Based on these results, we conclude that H8 is rejected which says that the interest rate has a positive effect on financial distress. Based on this study, the interest rate does not affect financial distress. According to BI data, macroeconomic conditions in Indonesia during 2015-2017 were relatively stable so that these conditions did not affect the health of the company.

i. Hypothesis 9

The test results state that the Exchange Rate does not affect the Financial Distress, with a B value of -0.011 and a significance of 1 which is above 0.05. Based on these results, we conclude that H9 is rejected which says that the exchange rate has a positive effect on financial distress. Based on this study, Exchange Rate does not affect financial distress. According to BI data, macroeconomic conditions in Indonesia during 2015-2017 were relatively stable so that these conditions did not affect the health of the company.

4. CONSLUSIONS AND SUGGESTIONS

1. Conclusions

On the basis of analysis of the results and discussion, the conclusions from this study are:

- a. The liquidity ratio proxied by the current ratio has a positive effect on the condition of financial distress in the real estate sector.
- b. The liquidity ratio that is proxied by a quick ratio has a negative effect on the company's financial distress in the real estate sector.
- c. The profitability ratio that is proxied by the net profit margin has a positive effect on the company's financial distress in the real estate sector.
- d. The profitability ratio proxied by return on assets has a positive effect on the condition of financial distress in the real estate sector.
- e. The solvency ratio proxied by the debt ratio does not affect the financial distress conditions of companies in the real estate sector.
- f. The solvency ratio proxied by the debt to equity ratio does not affect the financial distress conditions of companies in the real estate sector.
- g. Macroeconomic indicators proxied by inflation do not affect the condition of the financial distress of companies in the real estate sector.
- h. Macroeconomic indicators proxied by the exchange rate do not affect the financial distress conditions of companies in the real estate sector.
- i. Macroeconomic indicators proxied by interest rates do not affect the financial distress conditions of companies in the real estate sector.

2. Suggestions

Based on the conclusions above, some suggestions can be given as follows:

- a. For companies can pay attention to the liquidity and profitability ratios that affect financial distress to be able to take preventive action if the company is predicted to experience financial distress so that the company can avoid bankruptcy.
- b. In future studies can use other financial distress prediction models because the results of the research obtained can also be different and can also add periods of research and companies that are used as samples to obtain representative research results.
- c. The investors in making decisions need to consider the company's liquidity and profitability ratios, so that they don't investing capital into companies with unhealthy conditions.

5. REFERENCES:

- [1] Beaver, W.H et.al, (2011). Financial Statment Analysis and The Prediction of Financial Distress. *Foundations and Trends in Accounting. Vol V No.2.*
- [2] Boediono. (2014). *Seri Sinopsis Pengantar Ilmu - No. 5 Ekonomi Makro.* Yogyakarta: BPFE.
- [3] Brahmana, R. (2007). Identifying Financial Distress Condition in Indonesia Manufacture Industry. "*Journal of accounting*", h. 5-51.
- [4] Brigham dan Houston. (2012). *Dasar-dasar Manajemen Keuangan. Edisi V.* Jakarta: Salemba Empat.
- [5] Djumahir. (2007). Pengaruh Variabel-variabel Mikro Variabel-variabel Makro terhadap Financial Distress pada Perusahaan Industri Food And Beverages yang terdaftar di Bursa Efek Jakarta. *Jurnal Aplikasi Manajemen. Volume. 5 No. 3 Desember 2007.*
- [6] Eduardus, Tandelilin. (2007). *Analisis Investasi dan Manajemen Portofolio.* Edisi Pertama, Cetakan Kedua. Yogyakarta:BPFE.
- [7] Fahmi, Irham. (2012). *Analisis Kinerja Keuangan.* Bandung: Alfabeta.
- [8] Ghozali, Imam. (2013). *(a)Aplikasi Analisis Multivariate Dengan Program IBM SPSS 21 Update LPS Regresi.* Edisi VII. Semarang: Universitas Diponegoro.
- [9] Hanafi, Mamduh dan Abdul Halim. (2003). *Analisis Laporan Keuangan.* Edisi Revisi. Yogyakarta: UPP AMP YKPN.
- [10] Hapsari, Evanny Indri. (2012). Kekuatan Rasio Keuangan dalam Memprediksi Kondisi Financial Distress Perusahaan Manufaktur yang terdaftar di BEI. *Jurnal Dinamika Akuntansi.*
- [11] Ilman, Zakaria dan Nindito. (2011). *The Influence of Micro and Macro Variables Toward Financial Distress Condition on Manufacture Companies Listed in Indonesia Stock Exchange in 2009.* Proceeding International Conference on Humanities and Social Science 2 April 2011.
- [12] Ismail. (2011). *Majanemen Perbankan.* Jakarta: Kencana Prenada Media Group.
- [13] Jogyanto, H. (2014). *Teori Portofolio dan Analisis Investasi, Edisi Kesembilan.* Yogyakarta: BPFE.
- [14] Jumingan. (2011). *Analisis Laporan Keuangan.* Jakarta: PT Bumi Aksara.
- [15] Muchtar, Rahmidiani, & Siwi. (2016). *Bank dan Lembaga Keuangan Lain.* Jakarta : KENCANA.

- [16] Muhtar & Aswan. (2017). Pengaruh Kinerja Keuangan Terhadap Terjadinya Kondisi Financial Distress pada Perusahaan Telekomunikasi di Indonesia. *Jurnal Bisnis Manajemen dan Informatika*. Vol. 13, No. 3, Februari 2017.
- [17] Munawir. (2007). *Analisa Laporan Keuangan*. Yogyakarta: Liberty.
- [18] Pranowo, Achsani, Manurung, & Nuryartono. (2010). Determinant of Corporate Financial Distress in an Emerging Market Economy: Empirical Evidence from the Indonesian Stock Exchange 2004-2008. *International Research Journal of Finance and Economics*. ISSN 1450-2887 Issue 52.
- [19] Ruslinawati, Hilda Ayu Devi. (2017). *Pengaruh Rasio Keuangan Terhadap Financial Distress pada Perusahaan Manufaktur yang Listing di BEI 2011-2015*. Retrieved by <http://etheses.uin-malang.ac.id/>
- [20] Sapoetri, Allisa Indah. (2013). *Analisis Pengaruh Rasio Keuangan dan Sensitivitas Variabel Ekonomi Makro Terhadap Financial Distress pada Perusahaan Manufaktur*. Retrieved by <http://eprints.perbanas.ac.id/>
- [21] Sari, Susi Puspita. (2018). *Pengaruh Likuiditas, Leverage dan Profitabilitas Terhadap Financial Distress pada Perusahaan Food and Beverage yang Terdaftar di Bursa Efek Indonesia Tahun 2010-2016*. Retrieved by <http://repositori.usu.ac.id/>
- [22] Subramanyam, K.R. (2014). *Analisis Laporan Keuangan*. Edisi 11. Jakarta:Salemba Empat.
- [23] Sukirno, Sadono. (2011). *Makroekonomi Teori Pengantar*. Edisi Ketiga. Jakarta:Rajawali Pers.
- [24] Sujarweni, Wiratna.V. (2017). *Analisis Laporan Keuangan*. Yogyakarta: Pustaka Baru Press.
- [25] Suwardjono. (2010). *Teori Akuntansi: Perekayasa Laporan Keuangan*. Edisi ketiga. Yogyakarta: BPF.
- [26] Syarifuddin, Ferry. (2016). *Konsep, Dinamika dan Respon Kebijakan Nilai Tukar Di Indonesia / Ferry Syarifuddin*. Jakarta: BI Institute.
- [27] Widarjo & Setiawan. (2009). Pengaruh Rasio Keuangan terhadap Kondisi Financial Distress Perusahaan Otomotif. *Jurnal Bisnis dan Akuntansi*. Vol. 11, No. 2, pp: 107-119.