

Analysis Of Profit Performance And Asset Management To Financial Distress Bakrie Group Company Listing In Indonesia Stock Exchange

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ABSTRACT: Financial distress is a condition where the company's finances are in an unhealth or a crisis that can lead to bankruptcy. This study aims to analyze the return on asset (ROA), return on equity (ROE), receivable turnover (RT), and inventory turnover (IT) to financial distress. By taking samples using purposive sampling, the sample of this research is five Bakrie Group companies that meet the criteria of ten population of Bakrie Group companies listing in Indonesia Stock Exchange. The research data are quarterly financial reports from 2012 to 2016 as many as 100 financial statement data. Financial distress analysis technique in this study using Altman Z-score method with the formula $Z = 6.56X1 + 3.26X2 + 6.72X3 + 1.05X4$. The Z-score indicator for determining financial distress is grouped into categories, non-financial distress ($Z > 2.99$), gray area ($1.81 < Z < 2.99$), and financial distress ($Z < 1.81$). The results of data analysis using logistic regression showed that ROA and IT variables have a negative and significant influence on financial distress. The ROE variable has a negative and insignificant effect on financial distress, and the RT variable has positive and insignificant effect on financial distress. That is, only ROA and IT variables are able to predict the condition of financial distress.

Index Terms: Altman Z-score, return on asset, return on equity, receivable turnover, inventory turnover

1. INTRODUCTION

Van Horne and Wachowicz (2005) point out that around the mid-early 1990s, the main task of financial managers was to raise funds and manage the company's cash position, until in the 1950s the responsibility of financial managers became wider by paying attention to the selection of investment projects worthy. However, by looking at the current economic dynamics, financial managers are not only able to manage cash and investment decisions, but also be able to adapt to economic instability, inflation and able to raise and allocate corporate funds well (funding decisions), and able to predict financial distress company. There is no general understanding of financial distress, in some studies financial distress is considered as a term in accounting and financial management to describe the condition of companies that will go bankrupt. Saleh and Sudyatno (2013) explained that some researchers even call the term financial distress with the term economic distress. Ellen and Juniarti (2013) describe other names of financial distress, which can mean economic failure, business failure, technical insolvency, insolvency in bankruptcy, and legal bankruptcy. Financial distress is a condition in which the company's finances are in an unhealthy state or crisis. Financial distress occurs before the bankruptcy, for it needs to know the company's financial distress conditions so that actions can be taken to anticipate leading to bankruptcy (Mas'ud and Srengga, 2012). Furthermore, Mas'ud and Srengga (2012) explain that there are many methods that have been applied by companies to predict financial distress in the company, because financial distress is a condition that requires deeper study then the method of analysis must be developed. In this study researchers tried to predict financial distress by focusing on earnings performance and asset management. Profit performance is measured by return on asset (ROA) and return on equity (ROE) variables, while asset management variables are measured by receivable turnover (RT) and inventory turnover (IT) variables. Saleh and Sudyatmo (2013) conducted a study on the effect of financial ratios on the occurrence of financial distress in the company and the results of ROE and ROA variables have a negative relationship pattern to

financial distress, meaning if ROA and ROE ratio low indicates the ability of the company's assets less productive in generating profit, and this condition will complicate the company's finances in internal funding sources for investment, so it can lead to the probability of occurring financial distress. Ellen and Juniarti (2013) conducted research on the implementation of good corporate governance, its impact on the prediction of financial distress on various sectors of industry and consumer goods. The result of this research is inventory turnover able to predict financial distress. The difference of this study with previous research, lies in the research variables. Most researchers focus on debt but in this study the researchers added receivables turnover to financial distress that has not been studied by many researchers before. Zulfikar (2016) explains the importance of receivable turnover related to the company's cash. And further affect the solvency of the company. Bad risky conditions for companies when the receivables fail to collect. This study aims to determine the significance of ROA, ROE, RT, and IT influence on financial distress.

2 METHODS

Research design

The location of this research was conducted at the Indonesian Stock Exchange (Makassar Stock Exchange) Representative Office located on Jln. Ratulangi Makassar, South Sulawesi, by taking data through official website of BEI (www.idx.co.id) and the company's official website of research object for the period of 2012 - 2016. The design of this research is generally classified as quantitative research because the data used is the company's financial report data is processed back with a special method based on existing theories. While the approach used in this research is descriptive approach. According to Julian et al (2014) which explains that descriptive quantitative research aims to provide a systematic and detailed description of scientific information derived from the subject or object. This research use independent variable (X) that is return on asset, return on equity, receivable turnover, and inventory turnover, and dependent variable (Y) that is financial

distress using Altman Z-score formula, with data analysis technique used logistic regression method. Population, Sample and Sampling Technique Population Sugiono (2010) explains that "the population is a generalization region consisting of objects or subjects that have a certain characteristic determined by the researcher to be studied and then drawn conclusions". The population in this study are all Bakrie Group companies listing on Indonesia Stock Exchange (BEI). Sample Sugiono (2010) defines "the sample is part of the number and characteristics possessed by that population." Size of the sample selected based on certain criteria established to represent the existing population, to obtain five samples of the company. Sampling technique Sugiono (2010) explains that the technique of determining the sample by purposive sampling technique is done with certain considerations determined by the researchers by setting some specific criteria. The criteria specified in the sample selection are:

- The Company is a company that is still listed as a consistent issuer in Indonesia Stock Exchange during the period 2012 to 2017.
- The Company consistently reports ongoing financial statements from 2012 to 2016 in quarter and year periods.
- The Company experienced negative net profit for at least two consecutive years.

Method of collecting data This data is obtained from literature studies by collecting various journals, books and previous research on financial ratios and financial distress. This data is obtained from the historical data and financial statements published by the company over a period of five years. This method is done by opening the official website of Indonesia Stock Exchange and related companies, so that obtained financial statement and general description of the related company. Data analysis technique Sucipto and Muazaroh (2016) explained that the descriptive analysis aims to provide a description of the research variables as independent variables in predicting significantly for the possibility of financial distress. Descriptive analysis provides information on mean or mean value, standard deviation, highest value and minimum value on data, variance value, sum, range, kurtosis, and skewness. Statistical analysis method used in this research is logistic regression. Yunanto (2017) explains that logistic regression is a regression used to test whether the probability of occurrence of dependent variables can be predicted with independent variables, with the equation:

$$\ln \frac{P}{1-P} = \beta_0 + \beta_1 ROA + \beta_2 ROE + \beta_3 IT + \beta_4 RT$$

Keterangan:

Ln	= Financial distress
β_0	= Konstanta
$\beta_1 ROA$	= Koefisien return on asset
$\beta_2 ROE$	= Koefisien return on equity
$\beta_3 IT$	= Koefisien inventory turnover
$\beta_4 RT$	= Koefisien receivable turnover

The overall model assessment is indicated by the Log Likelihood value (value -2LogL), ie by comparing the -2LogL value at the start (Block number = 0), where the model only includes the constants, with the -2LogL value at Block Number = 1, where the model inserting constants

with independent variables as well as control variables. If the value -2LogL Block Number 0 > value -2LogL Block Number 1, it shows an improved regression model (Sucipto and Muazaroh, 2016). The feasibility of the regression model was assessed using Hosmer and Lemeshow's Goodness of Fit Test equal to or less than 0.05 then the null hypothesis is rejected which means there is a significant difference between the model and its observation values so that the Goodness Fit model is not good because the model can not predict its observation (Sucipto and Muazaroh, 2016). The coefficient of determination on logistic regression can be seen in the value of Nagelkerke R Square. The value of Nagelkerke R Square is interpreted as R Square on multiple regression (Sucipto and Muazaroh, 2016). The classification matrix will show the predictive power of the regression model to predict the issuing decision of the going concern audit opinion by the auditor. This classification matrix can be seen in the Classification Table at the logistic regression output (Sucipto and Muazaroh, 2016). Sucipto and Muazaroh (2016) explained that hypothesis testing is done by comparing probability value (sig) with significance level (α). To determine acceptance or rejection of the hypothesis based on the level of significance (α) 5%, significant value (sig.) > Significance level (α), then the hypothesis is rejected or in accordance with the objective, or significant value (sig.) < Significance level (α), then the hypothesis is accepted.

3 RESULT

Altman Z-Score Analysis In this study the dependent variable is the financial distress symbolized by Y which will be analyzed by using Altman Z-score method. According to Astuty (2010) Altman Z-score method is as follows:

$$Z = 6,56X_1 + 3,26X_2 + 6,72X_3 + 1,05X_4$$

Keterangan:

Z	= bankruptcy index
X_1	= working capital to total assets
X_2	= retained earning to total assets
X_3	= earning before interest and taxes to total assets
X_4	= book value of equity to book value of total debt

Then the Z-score score is based on three categories, as follows:

- If the value of Z < 1.81 then including the financial distress company.
- If the value of 1.81 < Z < 2.99 then the company included in the gray area (prone to financial distress).
- If the value Z > 2.99 then including non-financial distress company.

Furthermore, the results of the analysis based on these categories are converted into categorical data. Sucipto and Muazaroh (2016) explain that this method is used for research whose dependent variable is categorical and its independent variable is a mixture of metrics and nonmetrics, and this analysis is also to test whether the probability of occurrence of dependent variables can be predicted with independent variables. The most common categories used in logistic regression by Sucipto and Muazaroh (2016) are 0 and 1. In this study 0 for non

financial distress and 1 for financial distress. And the result 79 data category "1" and 21 data category "0". Descriptive Statistics Analysis The average ROA (return on asset) value is -0.0338, and the minimum ROA value is -1.07 or -10.7% while the highest value is 0.07, the standard deviation of ROA is 0.13603, meaning that the company has a problem on the acquisition of the asset. For the average ROE (return on equity) is 0.2159 or 21.6%, the minimum ROE is -5.65, and the highest value is 22.77 or 227%, the standard deviation of ROE is 2.46946. This means that the company is experiencing constraints in earning profit from the equity side. The average value of the RT (receivable turnover) is 61.7846, the minimum value of RT is -392.01, and the highest value is RT 5549.54, the standard deviation for RT is 557.28077, meaning the company has a high enough receivable turnover. The average value for IT (inventory turnover) is 1.3337, IT minimum value of -25.42, and the highest score of 21.06, IT deviation standard of 7.17072. This means that the company sells its inventory of 1.3337 with a spread above the average value of 7.17072.

Logistic Regression Results

Table 1 Results of Logistic Regression

Variables in the Equation		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 ^a	ROA	-47.982	14.909	10.358	1	.001	.000
	ROE	-.907	.861	1.110	1	.292	.404
	RT	.041	.057	.526	1	.468	1.042
	IT	-.232	.072	10.343	1	.001	.793
	Constant	2.003	.450	19.788	1	.000	7.414

Source: SPSS 24, 2017

Based on the table obtained equation

$$\ln \frac{P}{1-P} = 2.003 - 47.982ROA - 0.907ROE + 0.041RT - 0.232IT$$

Table 2 -2 Log likelihood Block 1

Iteration History ^{a,b,c,d}		Coefficients					
Iteration		-2 Log likelihood	Constant	ROA	ROE	RT	IT
Step 1	1	83.322	1.216	-2.397	-1.40	.000	-0.088
	2	73.852	1.561	-7.658	-.254	.000	-1.42
	3	64.641	1.659	-24.676	-.409	.000	-1.75
	4	61.423	1.914	-40.253	-.630	.001	-2.09
	5	61.036	2.054	-47.097	-.804	.001	-2.24
	6	61.000	2.073	-48.151	-.868	.002	-2.25
	7	60.653	2.026	-47.627	-.880	.016	-2.25
	8	60.439	1.992	-47.577	-.897	.037	-2.29
	9	60.432	2.003	-47.965	-.907	.041	-2.32
	10	60.432	2.003	-47.982	-.907	.041	-2.32
	11	60.432	2.003	-47.982	-.907	.041	-2.32

- a. Method: Enter
- b. Constant is included in the model.
- c. Initial -2 Log Likelihood: 102.791
- d. Estimation terminated at iteration number 11 because parameter estimates changed by less than .001.

Source: SPSS 24, 2017

Table Iteration History block 1 or when the independent variable is included in model N = 100. Degree of Freedom (DF) = N - number of independent variables - 1 = 100 - 5 - 1 = 94. Chi-Square (X2) DF 94 table with probability 0.05 is 117.632. Value -2 Log Likelihood (60.432) < X2 table (117.746) thus indicates that the model with independent variable is FIT with data. Iteration History Block 0 (102.791) table value has decreased in Iteration History Block 1 (60.432), thus showing a good regression model.

Table 3 Hosmer and Lemeshow's Goodness Test

Hosmer and Lemeshow Test			
Step	Chi-square	df	Sig.
1	4.877	8	.771

Sumber: SPSS 24, 2017

The Hosmer and Lemeshow test table tests the suitability of independent variable models (ROA, ROE, IT, and RT) with empirical data. Based on table 5.5 the value of Chi-Square is 4.877 and the probability value is 0.771. Thus 0.771 > 0.05, means the model is able to predict the value of observations or can be said to match the observation data.

Table 5 Matriks Klasifikasi

		Predicted		Percentage Correct
		ZSCORE		
Observed	ZSCORE	non financial distress	financial distress	
		Step 1	non financial distress	
	financial distress	5	74	93.7
Overall Percentage				83.0

Sumber: SPSS 24, 2017

The number of non-financial distress samples is 9 + 12 = 21 data. Which really is not in the condition of financial distress as much as 9 data and that should not in financial distress but experiencing financial distress (categorized gray area but tend to non financial distress) as many as 12 data. The number of samples that experienced financial distress as much as 5 + 74 = 79 data. Which is really in the financial distress as much as 5 data and that should be in the financial distress but not in the financial distress (gray area but tend to financial distress). The result of logistic regression in table 5.7 also describes Overall Percentage value of 83.0% which means the accuracy of this research model is 83.0%.

4. DISCUSSION

Influence of ROA Against Financial Distress ROA variable significance level 0.001 < 0.05 (α), this proves that ROA has a significant influence on the condition of financial distress, and the value of B is negative value of -26.364 which means ROA has a negative relationship to financial distress. This shows that ROA has a significant effect and has a negative relationship to financial distress. That is, the higher the ROA, the less likely the company will experience financial distress. Saleh and Sudiyatno (2013) explain that if

the ROA is low then it shows the ability of the company's assets is less productive in generating profit, and conditions like this will complicate the company's finances in internal funding sources for investment, thus causing the occurrence of financial distress probability, so that ROA has a relationship pattern negative to the probability of financial distress. So ROA can predict the condition of a company's financial distress. Based on the results of this study proves that ROA affects the financial distress of Bakrie Group companies. This is due to the lower ability of the company to generate profits from its assets or can be said the company is not productive in terms of asset management. Thus the company must be more careful in the management of its assets. The Influence of ROE Against Financial Distress ROE with a significant level of $0.292 > 0.005$ (α), this shows ROE is not significant to the condition of financial distress, and the value of B ROE is negative value of -0.907 , which means ROE has a negative relationship to financial distress. This shows that ROE is not significant but has a negative relationship to financial distress. Saleh and Sudiyatno (2013: 89) explain when a low ROE indicates that the company lacks the ability to generate profit in terms of equity, and further complicates the company's finances in internal funding sources for investment and can lead to financial distress. The results of this study in accordance with research conducted Siregar and Fauzie (2013) where ROE is not significant and has a negative relationship to financial distress. Effect of RT on Financial Distress RT variable significance level $0.468 > 0.05$ (α), this proves that RT has a significant influence on the condition of financial distress, and on the value of B is positive value of 0.041 which means RT has a positive relationship to financial distress. Thus, RT has an insignificant relationship and has a positive value relationship to financial distress. Receivable turnover (RT) in this study is a new variable raised by researchers who have not been studied by many researchers previously associated with financial distress. Kuswadi (2006: 116-117) explains that if the average receivable rate is equal to zero, then the company no longer has any receivables or in other words, all receivables are collectible. From the definition can be concluded that the higher receivables, the easier the company experiencing financial distress, meaning that RT has a positive relationship to financial distress. The Influence of IT Against Financial Distress IT variable significance level $0.001 < 0.05$ (α), this proves that IT has a significant influence on the condition of financial distress, and on the value of B is negative value of -0.098 which means IT has a negative relationship to financial distress. This means that IT has a significant effect and has a negative relationship to financial distress. That is, IT can predict the condition of financial distress. The results of this IT study significant to financial distress, which means one of the reasons for the occurrence of financial distress due to the relatively high cost of the average inventory. Kamaluddin and Pribadi (2011) point out that low IT is sometimes a sign of excessive supply of goods, sluggish in distribution or wear and tear without swift action. results of research conducted by Kamaludin and Personal (2011) where inventory turnover (IT) has a significant effect on financial distress. And research conducted by Ellen and Juniarti (2013) where inventory turnover has a significant and negative impact on financial distress in several

companies of various industries and consumer goods.

5. CONCLUSION

Based on the research that has been done, it can be concluded that ROA (X1) has a significant effect and has a negative relationship to financial distress. ROE (X2) is not significant but has a negative relationship to financial distress. RT (X3) has an insignificant relationship and has a positive relationship to financial distress, and IT (X4) has a significant effect and has a negative relationship to financial distress. Suggestion of this research is can be used as one of reference in doing corrective actions both in terms of financial performance and asset management company because result of this research indicate from 100 data company of Bakrie Group 79 data having financial distress in order not to happen bankruptcy.

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