THE PREDICTION OF FINANCIAL DISTRESS ANALYSIS AND ITS IMPLICATION TO STOCK PRICE’S SUB SECTOR TRANSPORTATION IN INDONESIA STOCK EXCHANGE PERIOD 2007-2011

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ABSTRACT

Based on data from the Investment Coordinating Board (BKPM) showed that one of the tertiary sector decreased the decreasing of investments in the tertiary sector one more for the transportation sector. The Impairment of investment in the transportation sector gives an indication of changes in the expectations of the shareholders to invest in this sector. The Low investment realization led to the company’s performance decrease, then the companies have financial distress. To predict the condition of the company’s financial distress can use the method of Altman Z-Score. Through the prediction of company’s financial distress can analyze the company’s stock price movements. Therefore, the purpose of this study is to predict financial distress and its influence of stock price on the transportation sector in Indonesia Stock Exchange. This study is an explanatory survey using descriptive analysis and verification methods. Statistical correlation analysis, regression, the coefficient of determination and hypothesis testing is used in this study. The results show that the prediction of financial distress’s transportation sub sector influenced the stock price of transportation sector listed on Stock Exchange positively and significance.

Keywords: Financial Distress, Altman Z-Score, closing price, transportation industry, stock exchange

1. Research Background

The increasing of oil prices in 2008 contributed to increase operating expenses, especially transportation industry, so it will affect the company's cash flow. The high operating expenses caused the investment in stock of the transportation industry became less attractive. This was due to the company becoming less liquid, as the company posted low revenue and low net profit. The companies were not liquid contributing to financial distress. Financial distress is indicated by the worse company's financial position, thus it will decrease the performance of company. This condition can cause the bankruptcy (Mustika, 2008). Therefore, The information of a company's financial position is important, especially for whom interested in financing decisions and investment decisions.

The Studies which relate with the company’s financial distress predictions have been carried out by a number of researchers. Early studies on the prediction of financial distress refered to the financial ratios that it can be used as an assessment tool performance and corporate bankruptcy prediction. However, The model of financial distress prediction were developed by Altman in 1968.
through multivariate discriminant analysis method (MDA). This method uses five types of financial ratios, which are grouped into a Z-score. Bankruptcy prediction model was intended to predict a manufacturing public company. Altman classifies firms into three categories based on cut-off values which were determined. The results of this study indicate that the Z-score models can be used to predict the bankruptcy of a business to the level of accuracy of 95% of the total sample used by Altman. Through this method, the analysis of a company’s bankruptcy can be predicted by a company’s financial ratios. Altman models facilitate further research to implement and develop a theory that is used in the research on other industry groups. Studies of the company’s bankruptcy have been done by Kurniasih (2000), Endri (2009), Ramdhani and Lukviarman (2009), Hayes et al. (2010), Rahayu et. al (2010), and Joseph (2011). The result of research shows that the model of the Altman Z-Score can predict corporate bankruptcy both manufacturing company and non-manufacturing companies.

The information of Financial distress is very important for internal and external parties. For the insider, this information can be used to evaluate the investment decision and the financing decision which has been made by top management, so the decision financing which will be made in the future become more effective. For investors in particular, this information can be considered in making an investment decision, so that investors can make investments with the best investment selection in stock.

Investor's investment decision will impact to stock price. When investors assess the financial performance is good, he will exercise investment of stock. This condition will increase the demand for company's stock, so stock price will rise. Likewise, when investors assess the company's poor performance, investors will not invest, even shareholders can take off their shares, so that the supply of stock will be high. The impact is stock price will decline.

Based on preliminary surveys, the average of transportation company's stock price in period 2008 to 2009 showed a significant decline but in 2010, the stock price was increased and the stock price decreased back in 2011-2012. This is contrast with the average of Z-score values were relatively stable. This is not consistent with the theory that the financial distress prediction have a relationship positively with stock prices. When the financial distress prediction is poor, the stock price decreases or vice versa.

From the phenomena about stock price, this research aims to reexamine the financial distress prediction model which has been modified by Altman on transportation sub sector and examined the effect of the bankruptcy prediction of a firm to stock price on the Indonesia Stock Exchange in the transportation sub sector the period 2007 - 2011.

2. Literature Review

The Performance of a company can be seen from the financial ratios that have been achieved by a company. Financial ratio is a comparison between the financial data with other financial data. Gitman (2012) suggested that the ratio analysis involves methods of calculating and interpreting financial ratios to analyze and monitor the firm's performance. Financial ratios can be used to determine the strengths and weaknesses of corporate finance.

Performance of a company is not always in good condition. Sometimes companies often face problems that can hamper their survival. One of the problems is financial difficulties (financial distress). Financial distress is a declining in the financial condition in which the company suffered an operating loss and net loss for the period running. Financial difficulties indicate a liquidity problem. Financial distress can be solved through rescheduling to operation and capital structure of the company (Darsono and Ashari, 2005). Financial distress occurred before the company is declared bankrupt or liquidated.

So that the company can determine the actual financial condition, the company must conduct a financial ratio analysis to determine whether the company is in good condition or having financial
difficulties (financial distress). This measurement can be showed health level of the firm. One of financial ratios that is often used to to assess the soundness of a company is the Altman Z-Score. This method is also used to predict the financial difficulties experienced by the company.

Altman Z-Score was the first model of financial distress who introduced by Edward L. Altman in 1968. The original of Z-Score model is a linear model with financial ratios to maximize the ability of the model in predicting financial distress. This model is essentially to find the "Z" that show financial distress of the enterprise and performance financial which reflect the future prospects of the company (Ramadhani dan Lukviarman, 2009).

2.1 Financial Distress

Financial distress is a company's financial condition declined over the several periods. This situation occurs when a company's cash flow conditions at some period did not match with the expected cash flows. According to Brigham and Daves (2003) financial distress begins when a firm is unable to meet scheduled payments or when the cash flow projections indicate that it will soon be unable to do so. Meanwhile, according to Darsono and Ashari (2005) financial distress can be defined as the inability of the company to pay its financial obligations at maturity that led to the bankruptcy of the company.

Occurrence of a company's financial distress is caused by several factors. According to Murtanto (2002) the factors of financial distress is caused by three factors: (1) common factors that is include economic, social sector, technology sector, and government sectors, (2) external factors which include customer sectors, sector creditors, and sector competitors, (3) internal factors that include the amount of debt, inefficient management, and abuse of power and fraud committed by an employee or management.

Assessment of financial distress can be seen from several indicators. They are cash flow information and cash flows for future periods, the analysis of the position and strategy of the company compared to competitors, and the Altman Z-Score (Darsono and Ashari, 2005). By knowing the indicators, internal party may make improvements and anticipate the bankruptcy of the company. As for external parties are lenders, investors, government, and accountants will provide more in-depth overview of the company's ability to manage the investment. (Fakhrurozie, 2007).

2.2 Metode Analisis Financial Distress

The financial distress analysis aims to obtain early warning of bankruptcy. The signs of bankruptcy can be known earlier, the better for the management to make repairs and to anticipate the various possibilities that will happen. Therefore, the analyzes were developed to predict corporate bankruptcy as early warning. The financial distress models that can measure a company's bankruptcy as follows (Supardi, 2003):

A. Model Altman Z-Score

A professor at New York University, Edward L Altman developed bankruptcy prediction method for assessing the performance of a company. The model, called the Z-Score is a linear model with financial ratios were weighted to maximize the ability of the model to predict. This model basically want to find the value of "Z". It is a value that indicates the condition of the company, whether in good health or not and show the performance of the company and reflects the company's future prospects (Ramadhani and Lukviarman, 2009).

To make Z-score model, Altman took 33 manufacturing companies as sample that went bankrupt in the period 1960 - 1965 and 33 companies that did not bankrupt in the same line industry and the same size. Using data from the financial statements 1-5 years before the bankruptcy, Altman compiled from 22 financial ratios the most likely taken and then it was made group to be five categories: liquidity, profitability, leverage, valuation, and activities. Five kinds of
ratios from the five variables selected will be combined to obtain the most accurate prediction of bankruptcy (and Lukviarman Ramadhani, 2009). A study of selected variables and sample produces several models of bankruptcy, namely:

1) **Model Altman Z-Score Pertama**

After doing research on the variables and samples selected, Altman produce the first model of bankruptcy. Equation bankruptcy is intended to predict a public manufacturing company. The model of Altman equation firstly as:

\[ Z = 1.2X1 + 1.4X2 + 3.3X3 + 0.6X4 + 0.999X5 \]

Where as:

- **Z** = Bankruptcy Index
- **X1** = Working Capital to Total Asset
- **X2** = Retained Earnings to Total Asset
- **X3** = Earning Before Interest and Taxes to Total Asset
- **X4** = Market Value of Equity To Book Value of Total Debt
- **X5** = Sales to Total Asset.

**Z** value is the overall index of multiple discriminant function analysis. According to Altman, there are cut off value of **Z** that can explain whether the company will fail or not in the future and it is dividing into three categories, as:

a) If the value of **Z** < 1.8 so the enterprises go bankrupt,

b) If the value of 1.8 < **Z** < 2.99, so the enterprises are in the gray area (can not be determined whether the company healthy or suffer bankruptcy),

c) If the value of **Z** > 2.99, so the company is not bankrupt or good condition

2) **Model Altman Z-Score Revisi**

Revisions were done by Altman as adjustments that was done in other to bankruptcy prediction model is not just for manufacturing companies that go public, but can be applied to private companies. Altman change the numerator Market Value of Equity to Book Value at **X4** into Equity to Book Value of Total Debt, because private companies do not have market prices for equity. Altman equation becomes:

\[ Z = 0.717X1 + 0.847X2 + 3.107X3 + 0.420X4 + 0.988X5 \]

Classification of companies that healthy and unhealthy based on the following criteria:

a) If the value of **Z** < 1.23 so the enterprises go bankrupt,

b) If the value of 1.23 < **Z** < 2.9 so the enterprises are in the gray area (can not be determined whether the company healthy or suffer bankruptcy),

c) If the value of **Z** > 2.99, so the company is not bankrupt or good condition.

3) **Model Altman Z-Score Modifikasi**

As time goes by and adjustments to various types of companies. Altman made modified the model to be applicable to all companies, such as manufacturing, non-manufacturing, and corporate bond issuers in developing countries (emerging markets). In this modifying **Z** - Score Altman eliminate the variable of **X5** (Sales to Total Assets). Because this ratio is very varied in industries with asset size different. Following equation in **Z**-Score Altman Modification became (Ramadhan and Lukviarman, 2009):

\[ Z'' = 6.56X1 + 3.26X2 + 1.05X4 + 6.72X3 \]

Classification of healthy and bankrupt companies are based on the value of the **Z** – Score modified Altman model are:

a) If the value of **Z**' < 1.1 so the enterprises go bankrupt,
b) If the value of $1.1 < \textbf{Z}' < 2.6$ so the enterprises are in the gray area (can not be determined whether the company healthy or suffer bankruptcy),
c) If the value of $\textbf{Z}' > 2.6$ so the company is not bankrupt or good condition

According Sawir (2003) the purpose of the calculation of the Z-Score is going to remind the financial problems that may require serious attention be instructions to act. If the Z-Score is lower than the company's management desired, it must be observed financial statements to find the caused of why it happened such . Monitoring the trend of Z-Score will also help evaluate the strength of the change (turnaround) companies.

B. **Model Springate**

The model was developed in 1978 by LV Gorgon Springate followed the Altman procedures. Springate model is a model that uses the ratio of the step-wise multiple discriminant analysis (MDA). In the MDA method takes more than one financial ratio which relate to the bankruptcy of the company to establish a good model. To determine the ratios which can detect the possibility of bankruptcy, Springate (1978) using MDA to choice 4 ratio of 19 financial ratios were popular in the literature, which were best able to distinguish between sound business and not bankrupt (Ramdhani & Lukviarman, 2008). The equation of Springate models are:

$$ S = 1.03X_1 + 3.07X_2 + 0.66X_3 + 0.4X_4 $$

Where as:

- $X_1 =$ Working Capital to Total Assets
- $X_2 =$ Net Profit Before Interest and Taxes to Total Assets
- $X_3 =$ Net Profit Before Taxes to Current Liability
- $X_4 =$ Sales to Total Assets

Overall index value of $S$ is a function of multiple discriminant analysis. Springate suggested cut-off values that apply to these models into three categories, namely:

1) If $S < 0.862$, an indication that the company faced a serious threat of bankruptcy
2) If $0.862 < S < 1.062$, indicating that the company is in a vulnerable condition
3) If $S > 1.062$, indicating the company in sound financial condition and has no problems with finances

This model produces accuracy rate of 92.5% by using the 40 companies which tested by Springate.

C. **Model Zmijewski**

Expansion in bankruptcy prediction studies conducted by Zmijewski (1983) adds to the validity of the financial ratios as a detection tool the company's financial distress. This model uses analytical ratios that measure profitability, leverage, and liquidity of a company for the model predictions. Zmijewski using probit analysis was applied to 40 companies that have been gone bankrupt and 800 companies that still survived at that time. This model results in the following equation:

$$ X = -4.3 - 4.5X_1 + 5.7X_2 - 0.004X_3 $$

Where as:

- $X_1 =$ Return On Asset atau Return On Investment
- $X_2 =$ Debt Ratio
- $X_3 =$ Current Ratio

The evaluation criteria for this model is the greater the value of $X$, the greater the possibility/probability of the company went bankrupt.

2.3 **Harga Saham**

Shares trade on the stock exchange have value or price. Price of a stock is the amount of money that must be paid the investors to own the stock. Share prices on the stock exchange can
have movement that reflects a variety of information residing on the stock exchange. The stock price is a summary of the effects of simultaneous and complex from a wide range of variables that influence, especially on the economic events (Halim, 2005).

Changes in stock prices are influenced by many factors, according Rinati (2009), namely (1) fundamental factors, including management's ability to manage its operating costs, the company's business prospects in the future, the prospects of the business done marketing, technology development used in operating activities of the company, the company's ability to generate profits, (2) technical factors include the development of exchange rates, capital market conditions, the volume and frequency of transactions in interest rates, capital market forces affecting the company's stock price, (3) socio-political factors, include the inflation rate, monetary policy conducted by the government, economy, and political situation of a country.

2.4 Pengaruh Prediksi Financial Distress terhadap Harga Saham
The practice of firm will be faced at the uncertainty that may occur. Uncertainty it could be something that is not expected by the company in the future. Uncertainty should be anticipated, one of them by performing financial ratio analysis to evaluate the performance of the enterprise. This can help enterprises take the best decisions to guarantee the survival of an enterprise.

One of the company's performance parameters of major attention from investors and creditors is the prediction of financial distress (financial distress) using the Altman Z-Score. Some research has been done, such as Adnan and Kurniasih (2000) research results strengthen the formula and research that has been conducted by Altman. The results of research shown that all or ten companies that the object of the study were analyzed using the Altman formula, all of which have financial ratios with a high degree of financial risk because the ratio is below 1.20. This study also proves that the bankruptcy of a company can be measured two years before the company went into bankruptcy. Research study of the potential bankruptcy of public companies in Jakarta Stock Exchange using the Altman Z-Score analysis as an indicator of the level of health or potential bankruptcy of the company. The results showed that the difference between the potential bankruptcy significantly before and during the crisis period and the analysis of the Z-Score is used referring to Altman's formula more aimed at the banking sector. (Supardi and Masuti, 2003). Then Endri (2009) predict bankruptcy of banks with Altman Z-Score. The results of the calculation of the Z-Score to predict bankruptcy in Commercial Bank's financial statements for 3 years from 2005-2007, all yield Z-Score had values smaller than 1.81, so it can be said to be having the possibility of bankruptcy. Further Hayes, Hodge, and Hughes (2010) conducted research using Z-score models that have been modified Altman. This model can be applied to the entire company by using only four types of financial ratios. The results of this study indicated that the modified model of the Z-score can be used to predict the bankruptcy of 9 retail companies as sampled by the level of accuracy of 94%. This study reinforces the Z-Score formula that has been modified Altman in predicting bankruptcy of non-manufacturing companies. Research conducted by Adnan and Arisudhana (2012) tested models of financial difficulties by models Altman and Springate models. The samples used were 6 companies of properties in Indonesia Stock Exchange from 2005-2009. The results of this study are of 5-year study period, Altman model just find the position of gray area in 2006. While Springate models found in 2005 there was one company, one company in 2007, two companies in 2008, and one company in 2009 was not insolvent position. From these two analyzes, it appears that the Altman Z-Score more stringent in assessing the level of bankruptcy compared Springate models. The second measurement method focuses on the company's ability to generate income using profitability ratios.

While the research related with the influence of financial prediction distress to stock prices, conducted by Pranowo (2009) to examine the effect on the financial performance of listed companies (listing) on the JSE until the end of 1998, used sample more than 254 companies. The
results of this study proved that financial performance was measured by the DFL, EPS, PER, ERR, DP, DY, had collectively very convincing positive effect ($\alpha = 0\%$) to the volume of trading ($V$). That is, the changes in five major research variables, will be followed by small changes in volume transaction. While Beaver in Supardi (2003) states that investors recognize and adjust the new position of corporate bankruptcy, more further financial ratios provide information into the stock price. Mas'ud in Setyorini (1999) also shows that the financial ratios affect stock prices, but not for a long time. Meanwhile, according to Astuti (2003) model of Altman’s financial ratios influence the stock price on the property and real estate company by 29.34%. High and low stock prices are formed on the Stock Exchange (the secondary market) is more influenced by considerations of buyers and sellers who make transactions, consideration include the condition of the performance of companies (bankrupt or healthy), industry outlook, the political situation, government policy and market conditions themselves Sunariyah (2004).

The potential bankruptcy of the company is the information affecting the behavior of investors in the stock exchange. Generally good performance company will be followed by an amount of investors to invest by buying shares one of them. Stock price may vary and reflect a variety of information.

3. Research Methods

This research included in the explanatory research, the research aims to explore or search for variables or factors contained in a phenomenon / condition / specific social settings. The purpose of explanatory research is to test a theory or hypothesis to strengthen or even reject the theory or hypothesis of the research that already exists (Zulganef, 2008). The method used is the method of verification. The purpose of verification is to test a relationship and determine the effect of $X$ on $Y$ (Marzuki, 2002).

The data used in this study are secondary data , ie historical data obtained from the Indonesian Capital Market Directory ( ICMD ) and www.idx.co.id. Based on this research the title above , then that becomes the variable of this study is the prediction of financial distress by Altman Z-Score modified and stock prices in the company transportation in Indonesia Stock Exchange 2007-2011 . So that the population in this study is that companies engaged in the transportation industry and listing or listed on the Indonesia Stock Exchange during the period 2007-2011 . The total population in this study were 22 companies. From the population is taken a number of sampling through purposive sampling method. It is the sampling method with certain criteria . The criteria used in determining the sample is transport industry companies that have gone public and registered during the research period and issuing financial statements that have been audited by a public accountant.

The Analysis technique of data begins with measuring the financial distress prediction using Almant Z-Score. Further data analysis techniques using parametric statistical analysis, the Pearson product moment correlation analysis and simple regression analysis. The regression models of this study are:

\[ HS = a + \beta FD + \epsilon \]

While testing the hypothesis that will be tested in this study used the $t$ test to test the significance of the effect of bankruptcy prediction on stock prices of the transportation companies . The statistical hypothesis in this study are:

$H_0$: $\beta yx = 0$, the prediction of financial distress by Altman Z-Score does not significantly influence stock price of the company transportation

$H_a$: $\beta yx \neq 0$, the prediction of financial distress by Altman Z-Score significantly influence stock price of the company transportation ($Y$).
The significance level used in this study was 5% ($\alpha = 0.05$), so the hypothesis testing criteria used criteria (1) if $\text{sig} < 0.05$ then $H_0$ is rejected it means variable $X$ affects $Y$ variables significantly, (2) if $\text{sig} > 0.05$ then $H_0$ is accepted it means the variable $X$ does not affect the variable $Y$ significantly.

4. Result & Discussion

Bankruptcy prediction calculations with Altman Z-Score modification begins by calculating financial ratios in the form of Working Capital to Total Assets, Retained Earnings ratio to Total Assets, Earnings Before Interest ratio and Taxes to Total Assets, and the ratio of Book Value of Equity to Book Value of Deb. From this ratio can be performed the calculations of Altman Z-Score modified, with the formula:

$$Z = 6.56(WCTA) + 3.26(RETA) + 6.72(EBITTA) + 1.05(BVEBVD)$$

Based on calculations using the above formula obtained the following results:

**Table 1**

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<th>NO</th>
<th>EMITEN CODE</th>
<th>2007</th>
<th>2008</th>
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<th>2010</th>
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<td>Bankrupt</td>
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</table>

Resources: Processed data

Based on the above table it can be seen that in 2007 40% of the transportation industry is expected to experience bankruptcy, 20% are in the gray area and 40% of the company in a healthy condition. In 2008 there were an estimated 40% of companies will go bankrupt, 30% in the gray area and 30% in healthy condition. Companies that experience a change in the prediction of bankruptcy is IATA from gray area into bankruptcy, while companies that are in bankruptcy prediction into a gray area is BLTA and TMAS. This shows that the company can improve the performance in 2008. Then the company in healthy condition and being broke is WEHA. Changes in business conditions is caused by one of factor in the economic conditions in 2008, as there was an increase in world oil prices led to an increase in operating expenses the company, so the company's profit declined.

In 2009, the bankruptcy prediction of transportation companies stood at 70% experienced a bankruptcy, 10% are in the gray area and 20% are in a healthy condition. Prediction of corporate bankruptcies increased by 30%. This means that there are companies in gray area turns into bankrupt. The companies experience a change in the financial performance from a gray area to be bankrupt are APOL, BLTA, and TMAS. Company BLTA and TMAS were already in the gray zone were not able to maintain its performance so back again into bankrupt condition. While companies SMDR which were previously healthy condition had decreasing performance, He is in the gray area. Increased corporate bankruptcy is due to the impact of the increase in world oil, so the impact on companies transport.
In 2010, the bankruptcy of firms experienced increasing. This is evident from the corporate bankruptcies increased by 80% or rise at 10% compared to 2009. This year, the condition of each company remained stable located on the same criteria in 2009, unless HITS was in healthy area moving into bankrupt condition. Later in 2011, corporate bankruptcies as much as 70%, as much as 10% in grey area and the company was in healthy condition as much as 20% of the 10 companies that were observed. In this, the company is still in the same condition with the condition in 2010, except TMAS was changing conditions from bankrupt situation to be healthy. Management TMAS apparently already quite capable of doing performance improvement. This can be seen from two consecutive years were in the criteria bankrupt in 2011 but was able to show the best financial performance. Growth the bankruptcy prediction of the transportation industry is shown in the following image:

Figure 1
Chart of Growth The Prediction Bankruptcy of Transportation Industry in Indonesia Stock Exchange Period 2008-2011

In the graph above it can be seen financial performance of ALPO had decreased from year to year greater than the other company. During two years of being in the gray area, then in 2009 to 2011, predicted the company went bankrupt in a row. So that the average prediction of bankruptcy for ALTO in the period 2008 to 2011 is predicted to become bankrupt company if the company is not able to improve its performance. It can be seen from the average prediction of corporate bankruptcy is at -1.97. It is into bankrupt criteria according to the method modified Altman Z-score.

Blta can raise its performance in 2009 of a state of bankruptcy to the gray area, but in 2010 to 2012 the company experienced a decrease, so into bankrupt. Blta throughout the period of study may be included in bankrupt company criteria with an average of bankruptcy prediction at 0.92. Furthermore CMPP criteria entered into the prediction of bankrupt in 2008-2012, with an average of bankruptcy prediction at -2.47. It shows the company is not able to repair the financial performance caused by internal and external factors. HITS is the company in healthy criteria in period 2008-2010, although judging from the value of the Z - Score nya has decreased each year. Later in period 2011-2012 the company predicted in bankrupt area. Based on the average value of the Z - Score over the study period, the company was included in the gray area criteria, because in 2008 the condition of the company has The highest Z - Score compared with other transportation companies.

Then IATA was in gray area in 2008 and subsequently experienced a declining in performance from 2009-2012 in the category of predication become bankrupt. This is indicated that
Z-score decreased, so that the average prediction of bankruptcy during the research period was -0.37. It is into bankrupt prediction criteria. In 2008, the TMAS was in bankrupt area, but in 2009 the company was able to improve its performance so get into gray areas. Later in the year 2010-2011 in the category of bankrupt and in 2012 the company can increase its performance back into a healthy company. When viewed from the average value of Z-score at 2.15, so the company was in gray area. RIGSS entered into the criteria of a healthy company in 2008-2012, with an average Z-score value of 3.84. Z-score value of the company is the highest compared to other transportation companies. RIGSS company can be considered by investors to invest in Indonesia Stock Exchange.

In the period 2008-2009, SMDR was in a healthy condition. Later in the year 2010-2012 the company's performance has decreased, which is in the gray area. The average value of Z-score at 2.70 is into the healthy criteria, so that the company can be considered by investors to invest. WEHA was in healthy area in 2008, but he experienced a declining in performance period 2009-2012, so the company predicted bankrupt during the period research. The average value of Z-score WEHA was 0.93 on the bankrupt criteria. Furthermore ZBRA was in bankrupt criteria in period 2008-2012, with an average of bankruptcy prediction at -3.80. It shows the company is not able to repair the financial performance caused by internal and external factors.

Information for bankruptcy prediction model of Altman Z-Score can be used as a basis for investors to consider investment decisions. If the value of the Z-Score indicates the performance is good or healthy, of course, investors will invest in the company. Increasing interest of investors who will invest as a positive signal to other investors, so that other investors will do the same in deciding the investment in the company. This will certainly have an impact on increasing the value of the company is reflected in which the high share price. To see the effect of the bankruptcy prediction model of Altman Z-Score modifications to the stock price, can be analyzed with simple regression method. Based on the results of the processing of the following data:

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.528</td>
<td>.279</td>
<td>.264</td>
<td>1.100294080741E0</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Z_Score
b. Dependent Variable: Stock_Price

In the table above can be explained that the closeness of the relationship between financial distress predictions and the share price of 0.528. This means that the two variables have a strong enough relationship. While variable of the prediction of financial distress contributed to the stock price at 0.279 or 27.9%, meaning that the Financial Distress Prediction contribute to the transportation sub sector stock price of 27.9%, and the remaining 72.1% is influenced by other factors not examined in this study. Thus model of the prediction of financial distress on stock prices can be analyzed with the following table:
Tabel 3
Simple Linear Regression The Prediction of Financial Distress Analysis and Its Implication to Stock Price’s Sub Sector Transportation in Indonesia Stock Exchange Period 2007-2011

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>5.622</td>
<td>.157</td>
<td>35.883</td>
</tr>
<tr>
<td></td>
<td>Z_Score</td>
<td>.207</td>
<td>.048</td>
<td>.528</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Stock_Price

Based on the table above, the regression equation is obtained as follows:

\[ Y = 5.622 + 0.207 \times \]

From the equation above can be explained that the constant size of 5.622 states that at the time of the Z-Score value equal to zero, then the stock prices at 5.622. While the size of the regression coefficient 0.207 states that each increasing Value Z-Score at 1% it will increase stock price as much as 0.207 percent. The positive sign states the relationship in the same direction, whereas if the decreasing of the value of the Z-Score would decrease stock price.

To test the significance of the effect of financial distress prediction to the stock price then testing the hypothesis using the t test. From the results of processing the data in the table above with a significance level of 0.05 obtained results that the significance value is smaller than 0.05, so it can be concluded that H0 is rejected and Ha accepted. Thus the financial distress prediction affects to stock price significantly. This research supports to the result of research Kurniasih (2000), Endri (2009), Ramdhani and Lukviarman (2009), Hayes et.al (2010), Rahayu et. al (2010), and Joseph (2011), Pranowo (2009), Setyorini (1999) that that the financial ratios affect stock prices and Astuti (2003) that model of Altman’s financial ratios influence the stock price on the property and real estate company.

5. Conclusion

Based on the financial distress prediction analysis shows that the majority of the transportation company is predicted to go bankrupt in the year 2008-2011. There is only one company whom are otherwise healthy for 5 years in a row, that is Riggs. But most companies are predicted to go bankrupt like Alpo, BLTA, CMPP, HITS, IATA, ZBRA still running its operations to date, this was due to the company can still survive and try to adapt to economic macro. Besides that the consideration liquidate a company is not only seen based bankruptcy prediction methods Altman Z-Score alone, but many factor should be thought more deeply.

Stock price performance of the transportation company on average has decreased. The declining of financial performance occurred starting from 2008. There was increasing in oil price which impacted to financial performance, especially transportation company. This condition affected stock price performance company which experiencing a declining. Therefore, the financial distress prediction to the stock price performance of this sub-sector correlate positively or the same direction. Based on the results of tests performed can be concluded that the Financial Distress Prediction with Altman Z-Score has a strong enough relationship with the transport company’s stock price, and impact positive significantly.
6. Reference
Adnan, Hafiz dan Arisudhana, Dicky. Analisis Kebangkrutan Model Altman Z-Score dan Springate pada Perusahaan Industri Property.