
**ANALYSIS OF CORPORATE BANKRUPTCY PREDICTIONS IN THE
TRADE SUB SECTOR COMPANY RETAIL IN INDONESIA**

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Abstract

A company bankruptcy analysis is carried out to get an early warning of signs of bankruptcy. When these alerts are detected early, management can take preventive policies. If this problem is not resolved, it will have a negative impact on the company, one of which will be bankruptcy. This study aims to analyze the prediction of bankruptcy in retail sub-sector companies listed on the Indonesia Stock Exchange (IDX) from 2015 to 2019. The sample used in the study consisted of 20 companies listed on the Indonesia Stock Exchange (IDX) with a purposive sampling method so that we get 100 units of observation. The data analysis technique used is the Altman Z-Score analysis. Based on the results of the research carried out, it can be concluded that in 2015 the companies that were in the danger zone were 25%. Gray zone by 30% and the safety zone by 45%. In 2016, 20% of the companies in the danger zone. Gray zone by 20% and the safety zone by 60%. In 2017, companies that are predicted to go bankrupt are 25%, gray zone by 30%, safety zone by 45%. In 2018, 25% of the companies in the danger zone. Gray zone by 35% and the safety zone by 40%. In 2019, companies in the danger zone were 20%, the gray zone was 20% and the safe zone was 60%. Gray zone by 20% and the safety zone by 60%. In 2017, companies that are predicted to go bankrupt are 25%, gray zone by 30%, safety zone by 45%. In 2018, 25% of the companies in the danger zone. Gray zone by 35% and the safety zone by 40%. In 2019, companies that were in the danger zone were 20%, the gray zone was 20% and the safe zone was 60%. Gray zone by 20% and the safety zone by 60%. In 2017, companies predicted to go bankrupt by 25%, gray zone by 30%, safety zone by 45%. In 2018, 25% of the companies in the danger zone. Gray zone by 35% and the safety zone by 40%. In 2019, companies in the danger zone were 20%, the gray zone was 20% and the safe zone was 60%.

Keywords: Bankruptcy Prediction, Altman Z-Score

1. INTRODUCTION

The need for data as information for external parties to predict the long-term sustainability of the company's operations to generate profits. In addition, this prediction also serves as a guide for interested parties in measuring the company's financial performance (Pratiwi, 2012). A company bankruptcy analysis should be carried out to get an early warning of signs of bankruptcy. When these signs are detected early, management can take preventive steps or policies. In addition, external parties can use bankruptcy predictions as a guide in making financial decisions.

Since 2015 the ASEAN Economic Community (AEC) which has a pattern of integrating the ASEAN economy through free trade between ASEAN countries has been inaugurated and Indonesia is one of the countries that joined. As a result of this free trade, products originating from the outside appearance which affects the Indonesian trade. Many companies in Indonesia,

one of which is a retail trading company. This retail sector has very strong competition, both competition between modern retailers and competition between modern retailers and traditional retailers. Modern retail companies continue to experience tremendous growth and development, developing in accordance with technology and innovation tailored to the needs of society. The conditions that occurred at the beginning at the end of 2019 and almost mid-2020, the corona outbreak that hit all countries in the world was very concerning. Instantly the wheels of the economy stopped turning. Many become victims and companies automatically close and work from home. This will greatly affect the productivity of the company, and ultimately have an impact on its workers.

A number of retailers announced the closure of their outlets in early 2019. First is the Hero Department Store which closes 26 outlets, then there is the Central Department Store which closes 1 of 2 outlets in Indonesia. (Zaking, 2019). This indicates a tendency for these companies to experience a decline in their business activities. During the last two years a number of food and fashion retailers have closed their outlets, including: 1) 7 Eleven, where 7 Eleven first opened its outlets in Bulungan, South Jakarta in 2009. Until 2014, they had successfully opened 190 outlets. But since 2015 the glory of 7 Eleven has begun to fade with intense competition from similar retailers such as Lawson and Family Mart. Other than that, The ban on the sale of alcoholic beverages in supermarkets is also seen as the cause. The peak of 7 Eleven's losses occurred in 2017, where their income dropped drastically by 50% from 2016 (a loss of IDR 456 billion).

When a company experiencing financial difficulties is already a signal for the company to go bankrupt. However, this is not a benchmark for the company's ability to continue its operations. Financial Distress or bankruptcy is the failure of a company to continue its operational activities in order to earn a profit. One of the methods used to predict bankruptcy is the Altman Z-score model popularized by Altman, EI (1968); Altman (1983); Altman (1995) is a business professor from New York University, USA. In theory, Altman combines several prediction models using statistical techniques through discrimination analysis used in predicting company bankruptcy. The ratio used to predict company bankruptcy is used for go public companies, namely Working Capital to Total Assets, Retained Earnings to Total Assets, EBIT to Total Assets (Earning Before Interest and Taxes to Total Assets), Market Value of Equity to Total Liabilities (Market Value of Equity to Book Value of Total Liabilities), and Sales to Total Assets. From the calculation results will be obtained a Z value (Z-Score) which can describe the company's financial position is in a healthy condition, vulnerable or in bad condition. Retained Earnings to Total Assets (Retained Earnings to Total Assets), EBIT to Total Assets (Earning Before Interest and Taxes to Total Assets), Market Value of Equity to Total Liabilities (Market Value of Equity to Book Value of Total Liabilities), and Sales to Total Assets (Sales to Total Assets). From the calculation results will be obtained a Z value (Z-Score) which can describe the company's financial position is in a healthy, vulnerable, or bad condition. Retained Earnings to Total Assets (Retained Earnings to Total Assets), EBIT to Total Assets (Earning Before Interest and Taxes to Total Assets), Market Value of Equity to Total Liabilities (Market Value of Equity to Book Value of Total Liabilities), and Sales to Total Assets (Sales to Total Assets). From the

calculation results will be obtained a Z value (Z-Score) which can describe the company's financial position is in a healthy condition, vulnerable or in bad condition.

The purpose of each company operates because it wants to achieve the ideal, namely the prosperity of the company by generating profit, the company grows and develops and can maintain its sustainability in the long term. In addition to financial ratios, bankruptcy predictions are also influenced by corporate management governance. Where corporate governance plays a role in running the leadership wheels of a company. The bankruptcy process took place gradually. It would be nice if the company can predict the sustainability of the company it manages. Management and company owners must be able to predict bankruptcy for the company. This was done as a way to anticipate the possibility of the company experiencing financial difficulties.

Therefore, based on the exposure to the background of the problem, this study is to determine how the prediction of bankruptcy in retail trading companies listed on the Indonesia Stock Exchange.

2. LITERATURE REVIEW

2.1. Company Bankruptcy

Bankruptcy or bankruptcy is usually defined as the failure of the company to carry out the company's operations to generate profits in accordance with its main objective, namely profit maximization. According to the Law of the Republic of Indonesia Number 37 of 2004 concerning Bankruptcy and Postponement of Debt Payment Obligations, which states: A debtor who has two or more creditors and does not pay off at least one debt that is due and can be collected, is declared bankrupt by a Court decision, either his own application or at the request of one or more creditors.

In general, bankruptcy can be defined as the failure or inability of a company to carry out its operational activities to achieve its goals. Rudianto (2013:251) defines bankruptcy as the inability of a company to pay its financial obligations at maturity which causes bankruptcy or liquidity difficulties which may be the beginning of bankruptcy.

Rudianto (2013:252) classifies three types of failure in the company, namely:

- 1) A company that is technically insolvent, if the company cannot fulfill its obligations which are due soon, but the value of the company's assets is higher than its debt.
- 2) Companies that face legally insolvent, if the company's asset value is lower than the company's debt value.
- 3) A company that is facing bankruptcy, that is, if it is unable to pay its debts and is declared bankrupt by the court.

In general, the main cause of company bankruptcy is a lack of competent management skills. But the main cause of this failure is influenced by various other factors which are often related to one another. According to Rudianto (2013:252) the causes of a company's failure can be classified into two, namely:

1) Internal factors

The lack of competence in company management will affect the policies and decisions taken. Errors in making decisions due to inadequate management competence which can be the cause of company failure, including financial and non-financial factors.

2) External Factors

Various external factors can cause a company's failure. External causes are various things that arise or come from outside the company and which are outside the power or control of the leadership of the company or business entity.

Rudianto (2013: 253) argues that bankruptcy information is very useful for several parties, including:

1) Management

If company management can detect the possibility of bankruptcy early, then preventive action can be taken. Activities or costs that are deemed to cause bankruptcy will be eliminated or minimized. So the prevention of bankruptcy, which is the final rescue action that can be done, can be in the form of a merger or financial restructuring.

2) Lenders (Creditors)

Company bankruptcy information can be useful for a business entity that is a creditor to make decisions about whether or not a loan is granted to the company. This is the next step, this information is useful for monitoring loans that have been granted.

3) Investors

Company bankruptcy information can be useful for a business that is positioned as an investor in another company. If the investor company intends to buy shares or bonds issued by a company that has been detected for possible bankruptcy, the prospective investor company can decide whether or not to buy the securities issued by the company.

4) Government

In several business sectors, government agencies are responsible for overseeing the operation of the business. The government also has a business entity which must always be supervised. It is in the interest of government agencies to watch for signs of bankruptcy early so that any necessary actions can be taken earlier.

5) Public Accountant

Public accountants need to assess the potential for life bankruptcy of the business entity they are auditing, because the accountant will assess the company's going concern ability.

2.2. Bankruptcy Prediction Tool

Some of the detection tools used to detect bankruptcies are generated from various studies that have been conducted by several experts who have concerns about bankruptcy in various companies in the world. Bankruptcy detection tools include the Altman Z-Score, Springate Model, and Zmijewski Model.

2.2.1. Altman Z-Score Method

Edward I Altman is one of the earliest researchers who studied the use of financial ratio analysis as a tool to predict corporate bankruptcy. The results of research conducted by Altman produced

a formula called the Z-Score. This formula is a ratio model that uses multiple discriminate analysis (MDA). In the MDA method, it takes more than one financial ratio related to company bankruptcy to form a comprehensive model. Altman revealed that the Z-Score Analysis is a method for predicting the bankruptcy of a company by combining several common financial ratios and giving different weights to one another. The resulting model from Altman's research is as follows:

1) First Altman Z-Score

This formula is generated from research on various manufacturing companies in the United States that sell their shares on the stock exchange and is more suitable for predicting the business continuity of manufacturing companies that go public. The first formula is as follows:

$$Z = 1,2X1 + 1,4X2 + 3,3X3 + 0,6X4 + 1,0X5$$

Information:

X1: Working Capital / Total Assets X4: Stock Market Value / Total Debt
X2: Retained Earnings / Total Assets X5: Sales / Total Assets
X3: EBIT / Total Assets

The results of calculations using the Z-score formula will produce a different score between one company and another. The score must be compared with the following standards for assessing the viability of the company:

- a. If Z value > 2.99 = Safe Zone.
- b. If the value is 1.8 < Z < 2.99 = Gray Zone
- c. If Z value < 1.8 = Danger Zone

2) Altman Z Score Revision

The following is the formula for the Altman Z Score Revision :

$$Z = 0.717 X1 + 0.847X2 + 3.107X3 + 0.420X4 + 0.998X5$$

Information:

X1: Working Capital / Total Assets
X2: Retained Earnings / Total Assets
X3: EBIT / Total Assets
X4: Book Value of Equity / Book Value of Debt
X5: Sales / Total Assets

The results of calculations using the Z-score formula will produce a different score between one company and another. The score must be compared with the following standards for assessing the viability of the company:

- a. If Z value > 2.9 = Safe Zone.
- b. If 1.23 < Z < 2.9 = Gray Zone
- c. If Z value < 1.23 = Danger Zone

3) Altman Z Score Modification

Altman conducted a third study regarding the potential bankruptcy of companies other than manufacturing companies, both those that went public and those that did not. The third Z-Score formula is as follows:

$$Z = 6.56 X1 + 3.26X2 + 6.72X3 + 1.05X4$$

Information:

X1: Working Capital / Total Assets

X2: Retained Earnings / Total Assets

X3: EBIT / Total Assets

X4: Book Value of Equity / Book Value of Debt

The results of calculations using the Z-score formula will produce a different score between one company and another. The score must be compared with the following standards for assessing the viability of the company:

- a. If Z value > 2.60 = Safe Zone.
- b. If the value is 1.10 < Z < 2.60 = Gray Zone
- c. If Z value < 1.10 = Danger Zone

Altman's findings set several ratios that predict a company's bankruptcy and define Z (Zeta) discrimination.

1) X1 Ratio (Working Capital: Total Assets)

Measure liquidity by comparing net liquid assets to total assets. Net liquid assets or working capital are defined as current assets less total current liabilities (current assets-current debts). Generally, when a company experiences financial difficulties, working capital will decrease faster than total assets, causing this ratio to fall. This ratio can be found with the formula:

$$X1 = \frac{\text{Current Assets} - \text{Total Current Liabilities}}{\text{Total Assets}}$$

2) X2 Ratio (Retained Profit: Total Assets)

This ratio shows the profitability ratio that detects the company's ability to generate profits. This ratio measures the amount of a company's ability to earn profits, in terms of the company's ability to earn profits compared to the operating assets turnover speed. This ratio can be found with the formula:

$$X2 = \frac{\text{Retained Earnings}}{\text{Total Assets}}$$

3) X3 Ratio (EBIT: Total Assets)

This ratio measures profitability, which is the rate of return on assets, which is calculated by dividing the company's annual earnings before interest and tax by the total assets on the year-end balance sheet. This ratio can be found with the formula:

$$X3 = \frac{\text{Earning Before Tax (EBIT)}}{\text{Total Assets}}$$

4) X4 Ratio (Value Shares: Total Debt)

This ratio is the opposite of debt per equity (Debt to Equity Ratio). The value of own capital is the market value of its own capital, which is the number of company shares multiplied by the stock market per share (number of shares x market price of shares per share).

$$X4 = \frac{\text{Total Of Share x Market Price Share}}{\text{Total Liability}}$$

5) X5 ratio (Sales: Total Assets)

This ratio measures the ability of management to use assets to generate sales, which is the company's core operations keep his life going.

$$X5 = \frac{\text{Sales}}{\text{Total Assets}}$$

2.2.2. Springate Score Method

Spring ate Score is a method for predicting the viability of a company by combining several common financial ratios given different weights. The Spring ate Score was produced by Gordon LV Spring ate in 1978 as a development of the Altman Z-Score. This model emphasizes profitability as the component that most influences bankruptcy (Rudianto, 2013: 262). The results of these studies produce the formula:

$$Z = 1.03X1 + 3.07X2 + 0.66X3 + 0.4X4$$

Information:

X1: Working Capital / Total Assets

X2: EBIT / Total Assets

X3: EBT / Current Debt

X4: Sales / Total Assets

The results of calculations using the Spring ate Score formula will produce a different score between one company and another. The score must be compared with the following standards for assessing the viability of the company:

- a. If the Z value > 0.862 = the company is healthy
- b. If the value of Z < 0.862 = the company has the potential to go bankrupt

2.2.3. Zmijewski Score Method

Zmijewski Score is a method for predicting the viability of a company by combining several general financial ratios which give different weights to one another. Zmijewski uses ratio analysis that measures the performance, leverage and liquidity of a company for his bankruptcy prediction model. The results of these studies produce the formula:

$$Z = -4,3 - 4,5X1 + 5,7X2 - 0,004X3$$

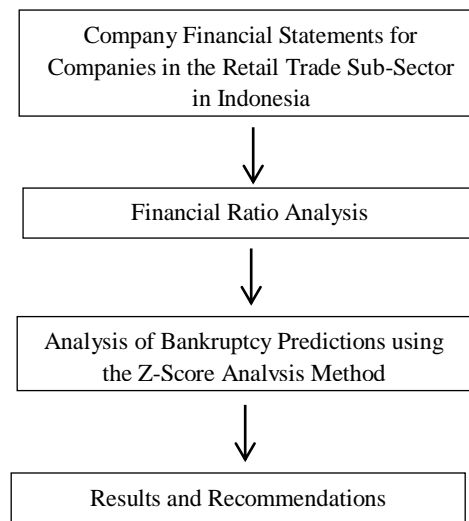
Information:

X1: Net Income / Total Assets

X2: Total Debt / Total Assets

X3: Current Assets / Current Debt

Framework of Mind



Reference: Diratama, 2013

3. RESEARCH METHODS

3.1. Population and Research Sample

The population in this study were all trade and investment sector service companies with the retail trade sub-sector listed on the IDX for the 2015-2019 period with a population of 27 companies. The number of samples is 20 companies. This sample was selected using criteria (purposive sampling). The sample selection criteria are as follows:

- 1) Retail trade sub-sector companies were registered consecutively during the study period 2015-2019 while the research period was 2016-2020.
- 2) Retail trade sub-sector companies that do not announce financial reports during the study period 2015-2019, while the research period is 2016-2020.

3.2. Operationalization of Variables

Bankruptcy is a situation or situation where a company fails or is no longer able to fulfill its obligations because the company lacks and insufficient funds to run or continue its business so that the economic goals the company wants to achieve cannot be achieved. The Altman model used in this study is the Modified Altman Z-Score Model. The Modified Altman Model is used to measure the potential bankruptcy of manufacturing companies, non-manufacturing companies, both go public and those that do not, and companies that issue bonds in developing countries. The formula for the Modified Altman Z-Score model is as follows:

$$Z = 6.56 X1 + 3.26X2 + 6.72X3 + 1.05X4$$

Altman Z - Score is then divided into criteria:

- 1) If the Z-Score value > 2.60 is categorized as a very healthy company, so it does not experience financial difficulties.
- 2) If the value of 1.10 < Z-Score < 2.60 is in a gray area so that it is categorized as a company that has financial difficulties, but the possibility of being saved and the possibility of bankruptcy is the same depending on the decision of the company's management as the decision maker.
- 3) If the Z-Score value < 1.10 is categorized as a company that has enormous financial difficulties and is at high risk, so the possibility of bankruptcy is very high.

The level of the company bankruptcy category, where healthy companies are given a score of 1. Companies in the gray area are given a score of 2, and companies in the distress zone are given a score of 3.

3.3. Components in the Modification of the Altman Z Score Calculation

3.3.1. Working Capital to Total Assets (X1)

Working Capital to Total Assets What is meant here is the difference between current assets and current liabilities. Is a ratio that detects the liquidity of total assets and working capital position, where working capital is obtained from the difference between current assets and current debt. The size of this variable is a description of the size of the liquidity condition of a company compared to its total assets, as well as the position of the working capital.

$$X1 = \frac{\text{Current Assets} - \text{Total Current Liabilities}}{\text{Total Assets}}$$

3.3.2. Retained Earning to Total Assets (X2)

Retained Earning to Total Assets, this ratio is a profitability ratio that detects or measures the company's ability to generate profits in a certain period, which is viewed from the company's ability to earn a profit compared to the operating assets turnover speed as a measure of business efficiency.

$$X2 = \frac{\text{Retained Earnings}}{\text{Total Assets}}$$

3.3.3. Earning Before Interest and Taxes To Total Assets

Earning Before Interest and Taxes to Total Assets, this ratio is a ratio that measures the company's ability to generate profits from the assets used. Some of the indicators that we can use in detecting problems with the company's profitability include increased trade receivables, continuous losses in several quarters, increased inventory, decreased sales, late collection results, reduced company credibility and willingness to give credit to consumers. who cannot pay at the appointed time.

$$X3 = \frac{\text{Earning Before Tax (EBIT)}}{\text{Total Assets}}$$

3.3.4. Market Value of Equity to Book Value of Liabilities

Market Value of Equity to Book Value of Liabilities, this ratio can be defined as the ratio that compares the book value of equity to total debt. The ratio that shows the company's ability to meet long-term obligations from the value of its own capital (common stock).

$$X4 = \frac{\text{Total Of Share} \times \text{Market Price Share}}{\text{Total Liability}}$$

4. RESULTS AND DISCUSSION

4.1. Results

4.1.1. General Description of Trading Sub-Sector Companies Retail

A retail trade sub-sector company is a company whose business unit is to sell consumer needs in retail and a sub-sector of the trade and investment sector service company. Consumer needs that are sold can be of various kinds, from food needs to building materials. Retail trade sub-sector companies listed on the IDX for the 2015-2019 period with a population of 27 companies.

4.1.2. Process and Results of the 2015 Altman Z-Score Analysis Model

Based on the results of the Altman Z-Score calculation from 20 companies that were included in the research sample and an analysis was carried out based on the Z-Score, in 2015 9 companies were included in the safe zone category, 6 companies were in the gray zone, and 5 companies were in the dangerous zone, meaning that There are still retail trade sub-sector companies that are predicted to go bankrupt based on the classification made by the Altman Z-Score in 2015.

4.1.3. Process and Results of the 2016 Altman Z-Score Analysis Model

Based on the results of the Altman Z-Score calculation from 20 companies that were included in the sample in the study and an analysis was carried out based on the Z-Score, in 2016 12 companies were included in the safe zone category, 4 companies were gray zone, and 4 companies entered the dangerous zone, meaning that There are still retail trade sub-sector

companies that are predicted to go bankrupt based on the classification made with the Altman Z-Score in 2016.

4.1.4. Process and Results of the 2017 Altman Z-Score Analysis Model

Based on the results of the Altman Z-Score calculation from 20 companies that were included in the study and an analysis was carried out based on the Z-Score, in 2017 there were 9 companies in the safe zone category, 6 companies in the gray zone, and 5 companies in the dangerous zone, This means that there are still retail trade sub-sector companies that are predicted to go bankrupt based on the classification made with the Altman Z-Score in 2017.

4.1.5. Process and Results of the 2018 Altman Z-Score Analysis Model

Based on the results of the Altman Z-Score calculation from the 20 companies that were included in the research sample and an analysis was carried out based on the Z-Score, in 2018 there were 8 companies in the safe zone category, 7 gray zone companies, and 5 companies in the dangerous zone, meaning that there are still retail trade sub-sector companies that are predicted to go bankrupt based on the classification made with the Altman Z-Score in 2018.

4.1.6. Process and Results of the 2019 Altman Z-Score Analysis Model

Based on the results of the Altman Z-Score calculation from 20 companies that were included in the study and an analysis was carried out based on the Z-Score, in 2019 there were 14 companies in the safe zone category, 2 gray zone companies, and 4 companies entering the dangerous zone, meaning that there are still retail trade sub-sector companies that are predicted to go bankrupt based on the classification made with the Altman Z-Score in 2019.

4.2. Discussion

During the last five years, from 2015 to 2019, each retail trade sub-sector company has a different financial condition for each year. The method used to predict company bankruptcy is used by using the Z-Score analysis and classified into 3 zones between the safe zone, the gray zone, or the danger zone where 4 variables are used to measure related to the company's financial ratios and used measurements and formulas. There were 5 companies that in 2015 were in a bankruptcy condition (dangerous zone), 4 companies in 2016 and 2017 were in a dangerous zone, in 2018 there were 5 companies that were in the danger zone, and in 2019 there were 4 companies that were in the danger zone and the companies also vary each year. Companies that enter the dangerous zone every year are PT. Midi Utama Indonesia Tbk and PT Kokoh Inti Arebama Tbk. Meanwhile, companies that were not previously in a dangerous zone but later entered in 2017, namely PT. Matahari Putra Prima Tbk.

The variables used to calculate the Z-Score value of a company that will predict bankruptcy is Net Working Capital to Total Assets (X1), Retained Earnings to Total Assets (X2), Earning Before Interest and Taxes (EBIT) to Total Assets (X3) , Market Value to Total Liabilities (X4). The variables used to measure the Z-Score can influence one another and have a relationship that affects each other. A large working capital value indicates the productivity of the company's assets which is able to generate a large operating profit as expected by the retail trade sub-sector

company. With the increase in profits obtained by the company, it will attract investors to invest in the company so that the company's retained earnings will increase. The increase in retained earnings and working capital owned by the company will encourage increased sales which are very good for companies in the retail trade sub-sector. Vice versa, if the working capital owned by the company is getting smaller, the company will get low profits as well. If the company experiences this, it will cause financial difficulties and if it continues, the company will go into bankruptcy (Diratama, 2013). If the company experiences this, it will cause financial difficulties and if it continues, the company will go into bankruptcy (Diratama, 2013). If the company experiences this, it will cause financial difficulties and if it continues, the company will go into bankruptcy (Diratama, 2013).

The prediction of bankruptcy in the Retail Trade Subsector in Indonesia is in a pretty good condition every year. The prediction of bankruptcies experienced by retail trade subsector companies in Indonesia shows fluctuation wherein 2015, 25% decreased in 2016 to 20% and increased in 2017, and remained in 2018 to 25%, then decreased to 20% in 2019. This decline occurs because companies that were previously in the danger zone are able to improve operational performance and financial performance, operational performance can be seen from the increase in sales so that company profits increase, for the financial performance we can see from the growth of company assets (Diratama, 2013). In the gray zone in 2015 it was 30% and decreased in 2016 to 20%, and increased again to 30% in 2017, then increased to 35% in 2018 and decreased in 2019 to 10%, an increase in the gray zone occurred because companies that were previously in the danger zone turned into a gray zone and decreased due to the company increases to being in a safe zone. In the safe zone in 2015 it was 45% and increased in 2016 to 60%, in 2017 and 2018 it decreased to 45% and 40%, then increased again to 70%. The safety zone increases because the financial condition of the company remains stable or is in a better condition than before so as to improve company performance. The increase in the gray zone occurs because companies that were previously in a dangerous zone turn into a gray zone and decrease because companies that were previously in a safe zone. In the safe zone in 2015 it was 45% and increased in 2016 to 60%, in 2017 and 2018 it decreased to 45% and 40%, then increased again to 70%. The safety zone increases because the financial condition of the company remains stable or is in a better condition than before so as to improve company performance. The increase in the gray zone occurs because companies that were previously in a dangerous zone turn into a gray zone and decrease because companies that were previously in a safe zone. In the safe zone in 2015 it was 45% and increased in 2016 to 60%, in 2017 and 2018 it decreased to 45% and 40%, then increased again to 70%. The safety zone increases because the financial condition of the company remains stable or is in a better condition than before so as to improve company performance.

5. CONCLUSIONS AND SUGGESTIONS

During the beginning of the research year, namely 2015 retail trade sub-sector companies listed on the Indonesia Stock Exchange which are in the danger zone there are 5 companies or 25%. The gray zone has 6 companies or 30% and the safe zone has 9 companies or 45%. In 2016, there were 4 companies in the retail trade sub-sector listed on the Indonesia Stock Exchange

which are in the dangerous zone or 20%. The gray zone has 4 companies or 20% and the safe zone has 12 companies or 60%. In 2017, the retail trade sub-sector companies listed on the Indonesia Stock Exchange are predicted to go bankrupt (dangerous zone), there are 5 companies or 25%, in the gray zone there are 6 companies or 30%, while the safe zone or health conditions are 9 companies. or 45%. In 2018, the retail trade sub-sector companies listed on the Indonesia Stock Exchange which are in the danger zone have 5 companies or 25%. The gray zone has 7 companies or 35% and the safe zone has 8 companies or 40%. Meanwhile, for 2019, there were 4 companies in the dangerous zone or 20%, in the gray zone there were 2 companies or 10%, while 14 companies were in the safe zone or 70%.

Bankruptcy predictions can occur and will be even greater if the company management does not evaluate and improve the condition and performance of the company's finances. Therefore, it is hoped that all retail trading sub-sector companies that have been listed on the Indonesia Stock Exchange will continue to make improvements to their performance so that the possibility of bankruptcy is smaller or not and can pay attention to the causes, causes, and risks of bankruptcy predictions.

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