

# CHAPTER I

## INTRODUCTION

### 1.1 BACKGROUND OF THE STUDY

Economic growth is an improvement in the capacity of an economy to produce goods and services, compared from one period of time to another. According to data from Bank of Indonesia (2017), Indonesia's economic growth is increasing over the years. The growth rate of Indonesia economy in 2017 was 5.07 percent shows an increase performance compared to 5.03 percent in 2016.

Increasing rate of economic growth over the years is the positive impact that Indonesia attained from globalization. Globalization provides opportunities as well as challenges to countries around the world. Globalization improves technological innovation and makes it easier for Indonesia to export product globally as well as attracting foreign firms to invest in Indonesia. (Bonilla, 2010).

On the other hand, globalization encourage foreign companies began to invest, ranging from small companies to large companies. Therefore, Indonesia's local brand must be ready to improve innovation, creativity and ability to manage resources effectively and efficiently to survive in competitive business world as the impact of globalization. (Ramadhani, 2015)

Brimantyo et al.(2012) stated that the need of analysis and prediction of financial condition become more significant not only towards investors and creditors, but also towards company itself to evaluate company's performance.

Indonesia has the largest economy in Southeast Asia which consists of many sector of industries. One of the industry sectors that has shown rapid progress for the past years is agriculture sector especially subsector palm oil plantation (Budidarsono et al., 2013)

Palm oil is a vegetable oil derived from the fruit of the palm tree, it is used for both food and non-food consumption. Total global production of palm oil is estimated at over 45 million tons, with Indonesia and Malaysia as the major world producers and exporters. Palm oil industry has experienced rapid growth in recent decades, and has become a significant contributor to the world market for vegetable oils. (Budidarsono et al., 2013)

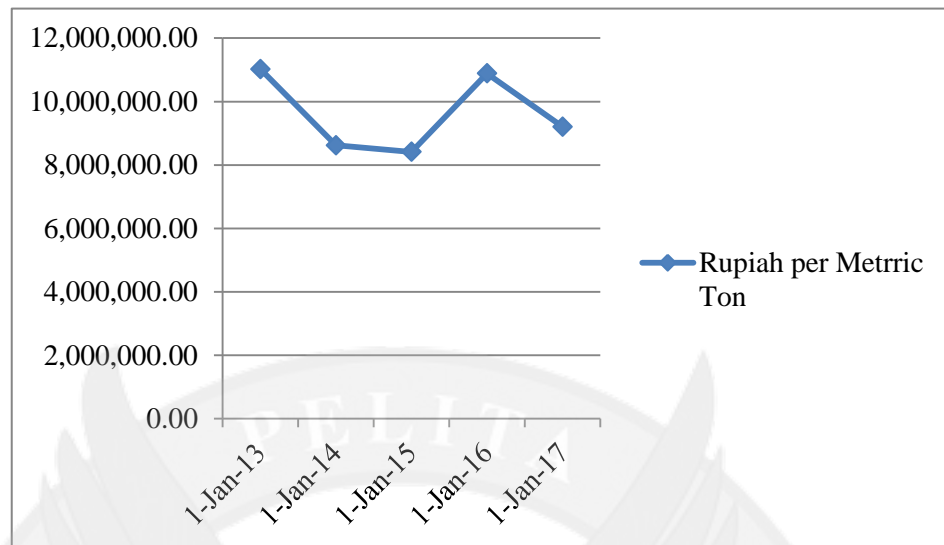
Over the long term, globalization has increased global palm oil demand which is reflected by rapid rising of production and export figures as well as by the growing quantity of its palm oil estate area.

The importance of the palm oil industry to rural development has been recognised by both the Indonesian Government and the private sector. Significant growth in the palm oil industry has led to palm oil becoming component of economic activity in regional economies. (Budidarsono et al., 2013)

Palm oil is a strategic commodity and plays significant role for Indonesia's economic development as Palm oil is Indonesia's second largest agricultural product. For the last decade, palm oil has been Indonesia's most significant agricultural export. In 2008, Indonesia exported over \$14.5 billion in palm oil related products. In terms of land-use, oil palm gives the highest yield per unit area as compared with any other crop-based oil seeds. (Azhari, 2017)

However, over 2013-2017 there is declining trend in the world's palm oil prices. Fluctuating in world's palm oil prices will surely affect Indonesia's palm oil export prices as well as global oil demand. This situation has become urgent, especially for farmers and palm oil companies.

From the Figure 1.1 below, world's palm oil prices constantly declining from Rp.11,023,450 in 2013 to Rp. 8,415,007 in 2015 and slightly increase in 2016. In addition, in 2017 palm oil prices decline again to Rp. 9,207,281.



**Figure 1.1 World's Palm Oil Prices During 2013-2017**

Source: Index Mundi (2018)

There are some efforts that have been done by palm oil plantation companies when world's palm oil price is decreasing such as optimizing the use of existing land, applying efficiency strategy in running operational activities include improving employee efficiency, increase domestic palm oil consumption as the solution on reducing export of palm oil, transforming palm oil into its sub-product such as food product and cosmetic product that have more profitable price.

According to Winardi, et al. (2017), the movement of world CPO price would be transmitted to domestic CPO price. Constant decline of world's palm oil will surely affect Indonesia palm oil export prices as well as economic development of Indonesia that may threaten palm oil plantation companies in Indonesia to confront financial distress.

Companies that have been operating for a long period cannot rule out the possibilities to confront financial distress that may lead to Therefore, it is very important to observe palm oil industry and avoid challenges that may arise as the result of fluctuating prices of palm oil before confronting financial distress.

Financial distress is a broad concept that consists of several situations in which a company faces financial difficulties. Common terms to describe these situation are bankruptcy, failure, and inability to pay off debts. (Rhomadona, 2014). There are some models that can be used to predict financial distress such as Altman Z-score, Springate, Grover and Zmijewski model (Prambekti, 2014).

The accuracy of Altman Z-score model in predicting bankruptcy at the beginning of research done by Altman (year 1968) reached 72% in two years before bankruptcy and Altman reconducted a series of subsequent studies covering three different time periods up to 1999 and the accuracy result reached 80-90%. The Z-Score model is the most useful tool used by accountants, auditors and creditors to evaluate loans since 1985 until now to predict go public companies (Edi and Tania, 2018).

Springate model has an accuracy rate of 92.5% Springate model was the first model to be introduced by Gordon LV Springate in 1978. Basically, Springate model is a revolution of the Altman model developed by Multiple Discriminant Analysis. Springate model can be used as an early warning system of bankruptcy (Prambekti, 2014).

Grover model is able to predict financial distress. This shows that financial ratios used in Grover model are able to illustrate a company's financial distress. Grover model uses three financial ratios to predict financial distress. (Gunawan et al, 2017)

The other model that is not included in this research is Zmijewski model. According to Thanjaya (2016), Zmijewski model is not suitable to be used in Indonesia .According to Hantono (2019), Zmijewski is a model that only focus on leverage ratio.

Previous researches had been doing comparison on which model is the best prediction model for indicator of financial distress. Yoseph (2018) stated that Springate model is the best prediction model with the accuracy level of 80%. Fauzan (2017) used Altman Z-Score, Springate,

Zmijewski, and Grover model as financial prediction model. The result indicated that Grover method is the most accurate method to predict the bankruptcy of the banks. Juliana T. Z.(2014) evaluate bankruptcy prediction from Springate , Zmijewski and Altman Z Score to find out best prediction model and the result is Altman is the best prediction model to predict financial distress in palm oil companies. Devy and Mulyo (2018) concluded that Springate cannot be used to predict financial distress in retail companies.

Basically, every model has some advantages and disadvantages. In more specific circumstances, a certain model can be effective, but in different sector the model may not be appropriate. Results in previous research are inconsistent in what model is the most appropriate model to predict financial distress. Altman is suitable for go public companies, Springate and Grover has high accuracy in predicting financial distress whereas Zmijewski have been used by few researchers and some of them stated that Zmijewski is inappropriate to be applied in predicting financial distress in Indonesia.

Based on the background above, the author is interested to conduct a research entitled **“The Evaluation of Altman Z-Score, Springate and Grover model in predicting Financial Distress on Palm Oil Plantation companies listed in Indonesia Stock Exchange”**

## **1.2 PROBLEM LIMITATION**

The researcher limits her research on evaluating the prediction result generated from three financial distress prediction model include Altman Z-score, Springate, Grover model. There are some other prediction models for financial distress. However, due to time constraint, the researchers only focused on three prediction model such as Altman Z-score, Springate model and Grover model. The research object is limited to 7 palm oil companies listed in IDX year 2013-2017.

### **1.3 PROBLEM FORMULATION**

Financial performance of palm oil plantation companies listed in IDX plays a key role in the growth of economic growth as Indonesia is the largest producer and exporter of palm oil worldwide. Inadequate planning and applying inappropriate prediction model may companies to confront financial distress. The urgency of this research is that financial distress should be identified before companies confront financial distress using the three prediction models. Therefore, formulation of the research problems are as follow:

1. Does Altman Z- score model partially have a significant effect toward predicting financial distress in palm oil companies listed in IDX year 2013-2017?
2. Does Springate model partially have a significant effect toward predicting financial distress in palm oil companies listed in IDX year 2013-2017?
3. Does Grover model partially have a significant effect toward predicting financial distress in palm oil companies listed in IDX year 2013-2017 partially?
4. Does Altman Z-Score Model, Springate model and Grover model simultaneously have significant effect toward predicting financial distress in palm oil companies listed in IDX year 2013-2017?

### **1.4 OBJECTIVE OF THE RESEARCH**

The objectives of this research are:

1. To analyze whether Altman Z- score model partially has a significant effect toward predicting financial distress in palm oil companies listed in IDX year 2013-2017.
2. To analyze whether Springate model partially has a significant effect toward predicting financial distress in palm oil companies listed in IDX year 2013-2017.

3. To analyze whether Grover model partially has a significant effect toward predicting financial distress in palm oil companies listed in IDX year 2013-2017.
4. To analyze whether Altman Z- Score, Springate and Grover model simultaneously have significant effect toward predicting financial distress in palm oil companies listed in IDX year 2013-2017

## **1.5 BENEFIT OF THE RESEARCH**

This research aims to provide benefit from the results obtained. and is expected to provide benefit such as theoretical benefit and practical benefit

### **1.5.1 THEORETICAL BENEFIT**

Through this research, it is expected that managers and business practitioners are able to obtain theoretical benefit such as:

1. The result of this research can increase the knowledge and insight in the field of finance.
2. The result of this research can be used as material and input in conducting research in similar field.

### **1.5.2 PRACTICAL BENEFIT**

#### **1. For companies**

Through this research, it is expected companies can have a better understanding of the analysis of financial predictions distress model to predict financial distress and help company in making decision to avoid confronting financial distress.

#### **2. For Investors**

Through this research, investors are expected to be able to analyze and decide whether to invest in a company or not. It is also expected that this research can guide investors to see potential of

financial distress such as bankruptcy potential in a company which accordingly affects a better investment decision.

## 1.6 SYSTEM OF WRITING

The researcher compiles the research in the format as follows:

### 1. Chapter 1 (Introduction)

This chapter consists of:

- a. Background study, which explains the reason of the research, which is to evaluate Altman Z- Score model, Springate and Grover model to predict financial distress.
- b. Problem limitation, which states the research boundaries
- c. Problem formulation, which stated the problem formulated in this research
- d. Objective of the research, which states the aim of the research
- e. Benefit of the research (theoretical and practical), which explains the possible application of research result and benefit of this research

### 2. Chapter 2 (Literature Review and Hypothesis Development)

This chapter consist of:

- a. Theoretical background, which is a compilation of related theories used as a reference in this research
- b. Previous research, which is the statement of previous researches in the relevant topic
- c. Hypothesis development, which states the testable relationship of two or more variables as a result of theory viewing
- d. Research model, which is a chart intended to prove the truth of the hypothesis
- e. Framework of thinking, which is the mindset of researchers linked to the research process



### 3. Chapter 3 (Research Methodology)

This chapter consists of:

- a. Research design, stating whether the research is using qualitative or quantitative method. In this research, quantitative descriptive analysis is used.
- b. Population and sample, which explains the entire research subject (population) and part of the entire research subject (sample)
- c. Data collection method, which explains the method of collecting research data
- d. Operational variable definition and variable measurement, which explains how a variable is measured (variable definition). Data analysis method, which explains the process of transforming raw data to a ready-to-use data.
- e. Data Analysis Method, which include Descriptive Statistics, Logistic Regression and Hypothesis Test

### 4. Chapter 4 (Data Analysis and Discussion)

This chapter consists of:

- a. General view of Research Object, which is a brief explanation and general view of the research object.
- b. Data analysis, which displays the result of data analysis conducted in this research
- c. Descriptive statistic, which are methods of collecting and displaying of data, for example in the form of tables, etc.
- d. Result of data quality testing, which consist of the decision making resulted from data analysis.
- e. Discussion, which is a more detailed explanation of the data analysis results

## 5. Chapter 5 (Conclusion)

This chapter consists of:

- a. Conclusion, which consist of a brief explanation of what was explained in the discussion section
- b. Implication, which consist of the outcome of this research, whether theoretical or practical
- c. Recommendation, which consist of advice for external readers as an effect of this research.

