CHAPTER 3
METHODOLOGY

This chapter summarizes the research methods calculations, classifications, and other terms used in this study.

3.1 Type of Research

This research is using the descriptive method, which done by analyzing and describing annual report data to determine palm oil plantation go public in Indonesia and Malaysia.

3.2 Population and Sample

Population in this research is Palm Oil Plantation Company go public in Indonesia and Malaysia. The sampling technique in this study uses purposive judgment sampling, which is sampling with certain criteria. Here are the samples criteria that used in this study:

a. Sample from this research are palm oil plantation company go public in Indonesia and Malaysia for their 4 years annual report (2013- 2016).

b. The Annual statements from those above Palm Oil Plantation Company have been reported and published.

c. The Palm oil plantation company disclosing the Corporate Social
Responsibility in it is annual report.

3.3 Data Types and Sources

This study uses historical data sources. The data used are secondary data. Secondary data is data obtained indirectly from third parties through the intermediary. This study uses data such as Annual statements of palm oil Plantation Company in Indonesia and Malaysia. Source of data derived from Annual statements published by the company concerned. Data obtained from the website that will be examined, from Indonesia Stock Exchange website (www.idx.co.id) are selected 17 palm oil company, and Bursa Malaysia website (www.bursamalaysia.com) are selected 22 palm oil company. The researcher collected, recorded, and reviewed all required information contained in the annual statements of the company concerned the period 2013-2016. In addition, the researcher also calculated the ratios contained in the Annual statements of those company.

3.4 Research Variable

Operational Variable is the definition of the variable (expressed in the definition of the concept) operatively, practically, in the realm of the object of research. The variable used in this research is independent and Dependent.

3.4.1 Independent Variable

The independent variable is the developing variable, causing the occurrence or changing of the dependent variable. The independent variable used in this research, In stage 1 is corporate social responsibility disclosure and in the second

stage profitability, total assets, leverage, the size of the board of commissioners, the proportion of independent commissioners and size of the company.

1.   Corporate Social Responsibility Disclosure

The corporate social responsibility disclosure (CSRD) is an accounting concept that takes into the transparency of social disclosure on corporate social responsibility (CSR), including voluntary disclosures regarding the social and environmental impacts life caused by the activities of the company (Restuningdiah, 2010). Meanwhile, Ali et al. (2011) described the benefits of CSR activities as the achievement of corporate goals and customer service, loyalty to the organization and overall organizational success.

In this study, the measurement of Corporate Social responsibility disclosure variables is done by comparing the number of CSR disclosure disclosed by the company with the overall item in the corporate social responsibility index.

$$\text{CSR Disclosure} = \frac{\text{Number of CSR disclosure disclosed by the company}}{\text{Overall item in the corporate social responsibility disclosure index}}$$

2.   Total Assets

According to Sukmalana (2007) assets are all things owned by companies that play a role in the company's operations such as cash, inventory, fixed assets, intangible assets and others. It can be concluded that total assets are total fixed assets and current assets. Assets show the performance undertaken by the company, the higher the total assets it will be better assessed also the performance of the company, so the CSR disclosure

of the company will get a positive feedback from stakeholders in the form of enhancement of corporate reputation and decision-making stakeholders in the form, loan capital, and purchase products, thereby improving company performance including financial performance (Yuliana et al, 2008).

Total assets are obtained by summing all the assets that exist in the company as in the following formula:

$$Total\ Assets = tangible\ assets + intangible\ assets$$

3. Profitability

According to Maiyarni (2014), every company expects to get profit / maximum profit. Profitability is a calculation that aims to determine the level of profit obtained by the company based on components that exist within the company. According to Hanafi and Halim (2007), profitability measures the ability of companies to generate profits at the level of sales, assets, and capital stock. Measured profitability is using profit margin, return on asset (ROA), and return on equity (ROE). According Sutrisno (2009) profitability is the ability to generate profits with all the capital working in it.

The measurement uses profit margin (NPM), return on asset (ROA), return on investment (ROI), return on equity (ROE), and earnings per share (EPS). Meanwhile, according to Harahap (2009) profitability describes the ability of companies to earn profits through all capabilities, and existing sources such as sales activities, cash, capital, number of employees, number of branches, and so on. Some profitability measures used are profit margin, return on asset (ROA), return on equity (ROE), return on total asset, basic earning power, earnings per share, and contribution margin.

ROA is obtained by comparing the net income with total assets as in the following formula:

$$ROA = \frac{\text{Corporate profits}}{\text{Total Assets}}$$

4. Leverage

According to Fahmi (2012) leverage ratio is a ratio that measures how much the company financed with debt. While in the broad sense of Kasmir (2012) said that the leverage ratio is used to measure the ability of the company to pay all its obligations, both long and short term if the company liquidated. Syamsudin (2009) leverage is a ratio that can show the relationship of loans long term given by the creditor with the amount of own capital provided by the owner of the company.

The formula used to calculate leverage is as follows:

$$Laverage = \frac{\text{Total Debt}}{\text{Total Equity}}$$

5. The proportion of independent commissioners

Independent commissioners represent percentage ratios between amounts commissioners who come from outside the company (independent commissioner) against the total number of members of the board of commissioners of the company.

The formula used to calculate the proportions of independent commissioners are as follows:

The proportion of independent commissioners

$$= \frac{\text{The number of commissioners independent}}{\text{The entire board of commissioners}}$$

6.   The proportion of Audit Committee

The roles and responsibilities of the Audit Committee, as set forth in the charter of the audit committee, are to provide opinions and support to the board of commissioners in fulfilling their responsibilities including review and clarification of financial information, selection, appointment, supervision of independent auditor work, evaluation of the effectiveness of the implementation of the internal audit function, effectiveness of internal control, monitoring of compliance with laws and regulations, risk reporting and implementation of risk management. The size of the audit committee in this study is projected by the number of members audit committees within the company.

The formula used to calculate the proportion of The independent audit committee is as follows:

The proportion of Independent audit committee

$$= \frac{\text{The number of Independent audit}}{\text{The entire of audit committee}}$$

3.4.2 Dependent Variable

The dependent variable is the variable that is influenced because of the independent variable. The dependent variable used in this research is In phase 1 is Indonesia and Malaysia and at the second stage Variable Dependent Global Reporting Initiative (GRI) 2006.

1) Global Reporting Initiative (GRI)

GRI has strong support from companies all over a world that is a stakeholder meeting to look for issues verification in general. This GRI encourages companies to set targets. Subsequently, the company reports or does not achieve the targets. If the company does not find its target, then they should give the reason. In this way, stakeholders have parameters that can be guidance on corporate accountability.

Parameters can be guidance on corporate accountability. GRI encourages an organization to enter into agreements with stakeholders and can choose the most relevant corporate progress indicators for organizational reporting and relationships with its stakeholders. GRI aims to help governments, investors, corporations and the public to understand more clearly the process of improvement in sustainability.

The GRI mission is "to continuously improve the report to the same level as the financial statements through the development of an acceptable general reporting framework." The GRI Guidelines are intended for environmental, economic and social reporting.

Setyawanti (2010) describes GRI aims to help governments, investors, companies, and communities better understand the process of sustainability improvement. This mission is to continue to improve the report to the same level as the financial statements through the development of an acceptable general reporting Framework the GRI Guidelines are intended for environmental, economic and social reporting.

The CSR disclosure indicator in this study uses indicators of Global Reporting Initiative (GRI) with a total of 79 disclosures that include: economic (EC), environment, human rights (HR), labor practices (LR), product responsibility (PR) and society (SO). The calculation of CSR is used to view the disclosure of social responsibility in the annual report using a score of 1 if there is disclosure according to GRI indicator and value 0 if there is no disclosure or not in accordance with GRI indicator.

The formula used to calculate the proportion of independent audit committee is as follows:

Corporate Social Disclosure Index

$$= \frac{\text{Total CSR disclosure are disclosed by the company}}{\text{79 CSR disclosures according to GRI}}$$

3.5   Data analysis method

This research uses descriptive statistics to explain the characteristics of data and hypothesis testing by using logistic regression, multiple regression, and T-test. The test is done by using SPSS release 20 software. As multiple regression requirements, the classical assumption test is performed to ensure that the research data is valid, unbiased, consistent and efficient regression coefficient interpretation (Gujarati, 2006), which includes normality test, multicollinearity test, autocorrelation test and heteroscedasticity test.

3.5.1   Descriptive analysis

Descriptive analysis is a method that is done by arranging data, classifying it, and then interpreting it so get a clear picture and about the problem under study (Amirullah, 2013). Descriptive statistics comprise the calculation of mean, median, standard deviation, maximum and minimum of each sample data of both countries. This analysis is intended to provide

an overview of the distribution and behavior of the sample data. Therefore, through this statistical tool, descriptions of each variable data can be identified. For CSR disclosure can be identified by the following criteria:

Table 3.1 Criteria CSR disclosure

Interval	Criteria
Index $\geq$ 10	Very low
10 < Index $\geq$ 25	Low
25 < Index $\geq$ 50	Medium
50 < Index $\geq$ 60	High
Index > 60	Very High

3.5.2   Hypothesis testing.

For the purpose of testing the hypothesis, in this study multiple regression, T- test, F-test, and Coefficient of Determination.

3.5.2.1   Multiple regression

Multiple regression analysis, the analytical technique used for know whether there is influence of overall variable X to variable Y. The regression equation is expressed as follows:

$$Y = b0 + b1X1 + b2X2 + b3X3 + b4X4 + b5X5 + e$$

Information:

Y = Disclosure of social responsibility

b0 = Constant numbers

b1, b5 = Regression coefficients

X1 = Total Assets

X2 = Profitability

X3 = Leverage

X4 = size of Board of commissioner independent

X5 = size of independent committee audit

e = Epsilon (influence of other factors)

As a prerequisite for multiple regression testing a classical assumption test is used to ensure that the research data is valid, unbiased, consistent and efficient regression coefficient interpretation.

The classical assumption test consists of several kinds of tests, which include the following.

The classical assumption test is performed to qualify linear regression analysis, i.e. unbiased and best estimate or often abbreviated as BLUE (best linear unbiased estimate). There are several assumptions that must be met in order that the conclusions of the test results are unbiased, such as normality test, multicollinearity test (for multiple linear regressions) and heteroscedasticity test.

a)   **Normality Test**

The normality test is used to test whether the dependent variable distribution for each value of a particular independent variable is normalized or not. In the linear regression model, this assumption is indicated by the normally distributed error () value. A good regression model is a regression model that has a normal or near normal distribution, so it is worth doing statistically. Testing of data normality is using Test of Normality Kolmogorov- Smirnov in SPSS program. According to Santoso (2002), the basis of decision-making can be done based on probability (Asymptotic Significance), namely:

- If the probability is> 0.05 then the distribution of the population is normal.
- If the probability is <0.05 then the population is not normally distributed

Visual testing can also be done with normal chart method Probability Plots in SPSS program. Basic decision making:

- If the data spread around the diagonal line and follow the direction of the diagonal line, it can be concluded that the regression model meets the assumption of normality.
- If the data spreads far from the diagonal line and does not follow the direction of the diagonal line, it can be concluded that the regression model does not meet the assumption of normality.

b)   **Multicollinearity test**

Multicollinearity test aims to test a regression model has a correlation between independent variables or not. The linear relationship between these variables is called multicollinearity. A good regression model should not occurred correlation between variables independent (Amirullah, 2013). Multicollinearity according to Imam Ghozali (2011) is to answer is there any.

While the regression model The good is a regression model that has no multicollinearity problem that does not exist among the independent variables or unrelated. If independent variables are mutually correlated (multicollinearity) then will be adjusted with its increase independent variable or in other

words not orthogonal. What understands orthogonal according to Imam Ghozali (2011) is the independent variable consolidated financial statements with zero

Multicollinearity is a situation where some or all independent variables are highly correlated. If there is a correlation perfect among the independent variables so that the value of the correlation coefficient among these independent variables is equal to one, then the consequences are:
1. The regression coefficients become unstable.
2. The standard error value of each regression coefficient becomes   infinite.

This means the greater the correlation between the same variables independent, and the regression coefficients the greater the error standard bigger anyway.

c)   Autocorrelation Test

Autocorrelation is used to test a model whether between the confounding variables of each independent variable affect each other. To know whether the regression model containing autocorrelation can be used D-W approach (Durbin Watson). Basic decision-making whether or not there is autocorrelation using Durbin-Watson table (Priyatno, 2012):

- DU <DW <4-DU then Ho accepted, meaning there is no autocorrelation

- DW <DL or DW> 4-DL then Ho is rejected, meaning autocorrelation occurs

- DL <DW <DU or 4-DU <DW <4-DL, meaning no certainty or definite conclusion.

DU and DL values can be correlated from the Durbin Watson statistics table.

d)   **Heteroccidacticity Test**

A heteroscedastic situation will cause the assessment of the regression coefficients to be inefficient and the estimates can be less or more than they should be. Thus, for the regression coefficients not to be misleading, the heteroscedastic situation must be removed from the regression model. The heteroscedasticity test aims to test whether in the regression model there is a variance inequality of residual one other observation (Ghozali, 2005) In this test if the result of data processing is the probability level of independent variable significance <0.05 then it can be said to contain heteroscedasticity. heteroscedasticity measured by the plot method, if the scatterplot shows the dots that form a certain pattern then heteroscedasticity occur. However, when it spreads above and below the y-axis and does not form a pattern there are no heteroscedastic.

3.5.2.2   Individual Parameter Significance Test (T-test statistics)

The t-test is a statistical test to determine whether the independent variable individually has an influence on the dependent variable. If the probability level is smaller than 0.05 then it can be said independent variables affect the dependent variable.

The testing procedures are after doing the calculation of t arithmetic and then compare the value of t arithmetic with t table. Criteria for decision-making are as follows:

• If t arithmetic> of t table and level of significance (α) <0.05, then Ho stating that there is no influence of independent variables partially to dependent variable rejected. This means that partially independent variables have a significant effect on the dependent variable.

• If t arithmetic <t table and level of significance (α)> 0.05 then Ho accepted, which means partially independent variable does not significantly affect the dependent variable

3.5.2.3 Simultaneous Testing (Test F).

In the simultaneous test will be tested the influence of the two independent variables together to the dependent variable. The F value of the above calculation results is then compared with F table or F obtained by using the risk level or significance of 5% and degree of freedom of the numerator and denominator, i.e. V1 = m and V2 = (n-m-1) where the criteria used are:

- if Fhitung ≤ Ftable then H0 accepted means:

Assumption if there is acceptance H0 it can be interpreted as the absence of significant influence from independent variables simultaneously (simultaneously) to the dependent variable.

- if Fcount> Ftable then H0 is rejected means:

Assumption if there is the rejection of H0, hence can be interpreted as existence of significant influence from independent variables simultaneously to the dependent variable.

3.5.2.4 Coefficient of Determination

The coefficient of determination (R^2) essentially measures the extent of the model's ability to explain the variation of the dependent variable. The coefficient of determination used to test how much influence of independent variable to dependent variable.

The coefficient of determination is between 0 and 1. The small value of R^2 means that the ability of the independent variables to explain the dependent variable is very limited. A value close to 1 means that independent variables provide almost all the information needed to predict the variation of the dependent variable (Ghozali, 2005).