CHAPTER III
RESEARCH METHODOLOGY

3.1 Research Design

This study uses quantitative approach to conduct the research. Furthermore, the data collection method in this research is by survey and the data collection technique is taken by spreading a questionnaire. Hence, the data that is used in this research are considered as primary data.

3.2 Population and Sample

Population is the general area of object or subject that has certain qualities and characteristics that are set up by the researcher (Sugiyono, 2012). In this research, the population is students in Economic Faculty of Universitas Islam Indonesia (FE UII). Since the students will become knowledge workers in the future. Although research on whistleblowing has been done in Indonesia, research on student perceptions of whistleblowing with variables giving reward, gender and legal protection is still rarely done.

Meanwhile, sample is part of population which used in the population’s area which is being researched and could represent the research’s population. In this study, the researcher used purposive sampling. Purposive sampling is a type of nonprobability or non-random sampling where members of the target population that meet certain practical criteria, such as easy accessibility, geographical proximity, availability at a given time, or the willingness to participate can be chosen as the sample for the research (Etikan, Musa, and Alkassim, 2015).
Therefore, the sample in this research is the accounting student, management student and economics students of FE UII.

Furthermore, Gay and Diehl (1992) mentioned that the minimum respondent in order to be able to conduct the validity test, reliability test, and hypotheses testing is 100 respondents.

3.3 Definition of Operational and Measurement of Variables

In this study, the researchers used two types of variables, namely the dependent variable and the independent variable. The dependent variable is the variable that is influenced or which is due to the existence of independent variables (free), while the independent variable is the variable that influences or causes the change or the emergence of the dependent variable (Sugiyono, 2014). The dependent variable used in this study is whistleblowing (Y). While for the independent variables to be examined are four variables, namely giving reward (X1), legal protection (X2) and gender (X3).

3.3.1 Whistleblowing

Whistleblowing is the disclosure of information by members of the organization (or former) who are perceived as illegal, immoral, or illegal practices under employee constraints to persons or organizations that may be able to influence the action (Miceli, Near, & Dworkin, 2008). Basically, a whistleblower is a martyr. Whistleblowing is the trigger for the disclosure of a crime scandal that often involves his own boss and colleagues.
In addition to this understanding, the Indonesian National Committee on Governance Policy (KNKG) added that whistleblowing was carried out in good faith and not as personal complaint against company policy.

Miceli, et al. (1995) explain that anyone can do a whistleblowing if they are willing and able to report or submit a suspected crime or a more organized crime. Because every public scandal can certainly affect all efforts to improve in the economic, political, legal and social background. Whistleblowing can provide a big role in revealing corrupt practices of public institutions, government and private companies. Without a reporting system, public participation to dismantle an alleged crime or violation is low (Nixson, Kalo, Kamello, & Mulyadi, 2013).

Based on the explanation, the instrument of the research questionnaires is as illustrated in Table 3.1.

### Table 3.1

**Measurement Instrument of Intention to Whistleblowing**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Question Items</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention to Whistleblowing</td>
<td>Fraud is unethical</td>
<td>Asiah (2017)</td>
</tr>
<tr>
<td></td>
<td>Violation reporting conducted by friend</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hide the fraud</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hide the fraud to get job promotion</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Violation reporting conducted by senior</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sacrifices the job for reporting fraud conducted by friend</td>
<td></td>
</tr>
</tbody>
</table>
Table 3.1 – Continued

<table>
<thead>
<tr>
<th>Variable</th>
<th>Question Items</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention to</td>
<td>Sacrifices the job for reporting fraud conducted by senior</td>
<td>Asiah (2017)</td>
</tr>
<tr>
<td>Whistleblowing</td>
<td>Violation reporting conducted by friend</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Violation reporting conducted by senior</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Supervisor for the fraud conducted by friend</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Supervisor for the fraud conducted by senior</td>
<td></td>
</tr>
</tbody>
</table>

3.3.2 Giving Reward

The relation of reward models with the desire to uncover fraud can be explained by the theory of reinforcement theory. Reinforcement theory explains that a person will behave in a certain way because there is motivation that encourages him in the form of appreciation he might receive. Xu and Ziegenfuss (2008) study found evidence that the role of internal auditors is very large in dismantling and disclosing fraudulent actions to the authorities when they get incentives or reward services.

The existence of reward models will eventually lead individuals to disclose fraudulent actions on any reporting path, both anonymously and non-anonymously, Seifert et al (2010) state that the whistleblower will no longer hesitate and will not hide his identity if he gets an award, because the organization will guarantee that the award is given officially and openly.

According to Dyck, Morse, and Zingales (2010) states that a reward model system that provides monetary or monetary rewards will be very effective in uncovering fraud in the organization. This evidence further indicates that quite a
number of individuals make efforts to disclose because they are driven by sufficient rewards.

Based on the explanation, the instrument of the research questionnaires is as illustrated in Table 3.2

<table>
<thead>
<tr>
<th>Variable</th>
<th>Question Items</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Giving Reward</td>
<td>Compensation to Whistleblower</td>
<td>Wahyuningsih (2016)</td>
</tr>
<tr>
<td></td>
<td>Cash Reward for Whistleblower</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cash Reward as Motivation to do Whistleblowing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Career Promotion as Motivation to do Whistleblowing</td>
<td></td>
</tr>
</tbody>
</table>

### 3.3.3 Legal Protection

Fitzgerald (1966) explained about Salmond's legal protection theory that the law was created with the aim of integrating and regulating and coordinating various interests of the community, guaranteeing the protection of interests of a party by giving limits or trying to give special treatment to other parties. What is said to be a legal interest is an effort to coordinate various human rights and interests, so that the law has broad authority to be able to manage the interests of the people who must be authorized by written rules.

In Indonesia, the protection of disclosures has not been fully implicitly regulated, but can still be connected with using Undang-undang Republik Indonesia No. 13 Tahun 2006, tentang Perlindungan Saksi dan Korban, in which the law is obliged to establish institutions that advocate and protect witnesses and
victims called LPSK (*Lembaga Perlindungan Saksi dan Korban*) which is currently underway.

Empirical research that examines the effect of protection guarantees for whistleblowers has not been widely implemented, in Indonesia several studies have only reviewed from a legal perspective the importance of protection for whistleblowers such as Turmu'dhi (2011) and Nixson, Kalo, Kamello, & Mulyadi (2013) who discuss legal protection against whistleblowers in corruption based on *Undang-undang Republik Indonesia No. 13 Tahun 2006, tentang Perlindungan Saksi dan Korban*.

Based on the variables definition explanation, the instrument of the research questionnaires is as illustrated in Table 3.3.

**Table 3.3**

**Measurement Instrument of Intention to Whistleblowing**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Question Items</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Protection</td>
<td>Witness Protection Institution</td>
<td>Shawver (2008)</td>
</tr>
<tr>
<td></td>
<td>Whistleblowing System by Independent Institution</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Legal Protection for Whistleblower</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Administrative Sanctions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Job Guarantee</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Personal Life Guarantee</td>
<td></td>
</tr>
</tbody>
</table>

### 3.3.4 Gender

According to Slamet (2001) gender is a variable that express a biological category, therefore it is a human nature related to culture and is often considered to be a determinant of a causal relationship in the workplace because of the
disparity of power that distinguishes humans, so it has an important role in the socialization process.

Whistleblowing can be done by anyone, both men and women. But there are differences in terms of ethics between men and women. Regarding to gender, evidence has shown that men and women are different in terms of ethics, beliefs, values, and behavior (Schminke, Ambrose, & Miles, 2003). Based on the previous research, there are different finding related to the gender toward whistleblowing intention. Therefore, the researcher examined the different behaviour between male and female students toward whistleblowing intention, by differentiating the responses of male and female students in FE UII, by using the codes of (1) for male and (2) for female.

3.4 Data Analysis Method

In this study, the researchers use Statistical Package of Social Science 21 Program (SPSS) to analyse all the data results.

3.4.1 Descriptive Statistics Analysis

Descriptive statistics which are used for data analysis by describing data has been collected as a result without any purpose of making conclusions for generalization. In this study, researchers used the average or mean to calculate the average whistleblowing intention for students of the Faculty of Economics, Universitas Islam Indonesia
3.4.2 Validity and Reliability Test

3.4.2.1 Validity Test

Accuracy of a data from measurement results are dependent on the validity of the measuring instrument. According to Azwar (2010) measuring instruments that do not meet the requirements such as respondents who do not understand the contents of statements or misinterpretations made by researchers can influence the validity level of a data. Arikunto (2010) said that, validity is a measure that shows the levels to the validity of an instrument. This means that if the instrument is said to be valid then the instrument must have a high number of validities, and vice versa. If the number of validity is low, then the instrument can be said to be lacking or even invalid.

According to Arikunto (2010), to measure the level of intercorrelations between variables and to determine whether or not a factor analysis can be done using Pearson Correlation. Valid whether or not a data can be determined by comparing between alpha and significance values. If the significance value is less than alpha, which is 5% then the data is said to be valid.

3.4.2.2 Reliability Test

To determine the level of validity of a research instrument, the researchers are also required to test the level of reliability. According to Azwar (2010), reliability is the consistency of measurement results which means how high the accuracy in measurement is. Reality here means that the measurements taken can produce results that are not much different if measurements are taken again on the
same subject or object (consistent). If it turns out that in the measurement gives results that are far different then the measurement is not reliable.

Arikunto (2010) explained that reliability testing of research instruments (questionnaires) using Cronbach Alpha coefficient formula using SPSS. The evaluation criteria for reliability testing are:

a. If the Alpha coefficient results have the significance level of 0.6 or greater, then the questionnaire is reliable;

b. If the Alpha coefficient results are smaller than the significance level of 0.6 then the questionnaire is not reliable.

3.4.3 Classic assumption test

The classic assumption test aims to determine the condition of the data used in research in order to obtain the right analysis model. The regression analysis model of this study requires a test of assumptions on data that includes:

3.4.3.1 Normality test

This normality test aims to test the data whether in the regression model. The residual variable has a normal distribution or not (Ghozali, 2009). A good regression model is one that has a normal or near normal residual distribution. To determine the normality test in this study using the Kolmogorof Smirnov method and with the help of the SPSS.

3.4.3.2 Heteroscedasticity Test

According to Ghozali (2009) heteroscedasticity test aims to test whether in a regression model variance occurs from the residual inequality one observation to another observation. A good regeneration model is that homoscedasticity or
heteroscedasticity does not occur (Ghozali, 2009). The way to detect the presence or absence of heteroscedasticity is by using the Glejser Test by looking at the probability of its significance above the confidence level of 5% or 0.05. In this study, the researcher used the SPSS to test related to heteroscedasticity.

3.4.3.3 Multicollinearity Test

Multicollinearity test aims to test whether the regression model found a high or perfect correlation between independent variables (Ghozali, 2009). If there is a correlation, there is a problem with multicollinearity. A good regression model is that there is no correlation between independent or independent variables.

The multicollinearity test in the study was conducted with a correlation matrix. According to Ghozali (2009) the testing of the presence or absence of multicollinearity symptoms is done by paying attention to the value of the correlation matrix produced during data processing and the value of VIF (Variance Inflation Factor) and Tolerance. If there is no correlation matrix value greater than 0.05, it can be said that the data will be analyzed regardless of the symptoms of multicollinearity. Then if the VIF value is above 10 and the Tolerance value is close to 1, then it is concluded that the regression model does not have a multicollinearity problem.

3.4.4 Multiple Linear Regression Analysis

The data analysis method used in this study is a quantitative analysis method that aims to analyze the effect of reward and legal protection on the whistleblowing intention. The method used in this study is multiple linear regression analysis (multiple regression analysis). Regression is used to determine
the independent variable on the dependent variable if the independent variable is more than one and only one dependent variable (Ghozali, 2009). In this study there are four independent variables namely reward and legal protection, while the dependent variable is only one, namely whistleblowing intention.

According to Ghozali (2009), the general form of multiple linear regression equations is:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3$$

Explanation:

- **Y**: Whistleblowing Intention
- **X1**: Reward
- **a**: Constanta
- **X2**: Legal Protection
- **b**: Coefficient
- **X3**: Gender

### 3.4.5 Coefficient of Determination

The coefficient of determination is used to predict how much the influence of the independent variables on the dependent variable provided that the results of the F test in the regression analysis are of significant value. To determine the value of this influence can be seen from the adjusted value or R2. If R2 is getting bigger (close to one), the contribution of the independent variable to the dependent variable is getting bigger. Conversely, if the value of R2 is getting smaller (close to zero), the smaller the independent variables on the dependent variable will be. Thus, it can be concluded that the amount of R2 is between 0 -1. Adjusted value (R2) can go up or down if one independent variable is added to the model (Ghozali, 2009).
3.4.6 F-Statistic Test

The model feasibility test or more popularly referred to as the F test is the initial stage of identifying a regression model that is estimated to be feasible or not. Feasible here means that the estimated model is feasible to use to explain the effect of independent variables on the dependent variable. The name of this test is referred to as the F test because it follows the F distribution following the testing criteria like One Way Anova. If the value of probability F is smaller than the alpha 0.05, then it can be said that the estimated regression model is feasible, whereas if the value of probability F greater than the alpha of 0.05, it can be said that the estimated regression model is not feasible.

3.4.7 T-Statistic Test

According to Ghozali (2006) the t test statistic is used to test the effect of each independent variable on the dependent variable. There are two criteria in making a decision whether Ha is supported or not supported, that is, the significance value of t <0.05 and the regression coefficient sign that matches the prediction. If Ha1 (reward has a positive effect on whistleblowing intention), and Ha2 (legal protection has a positive effect on whistleblowing intention) is supported, the regression coefficient for each of these variables must show a positive number.