CHAPTER III

RESEARCH METHOD

3.1 Population and Sample

The population of this research referred to the group of people who worked as an auditor in Public Accounting Firm in Solo. There were 40 auditors in Public Accounting Firm in Solo due to the easiness of finding the auditor.

The sample that was used in this research were 40 auditors, junior or senior auditors who worked in some Public Accounting Firm in Solo. The sampling method used quota sampling. Because it identified the stratums and their size.

3.2 Data Collection Method

This research is used quantitative method. By using quantitative method, this research used a questionnaire in the form of Likert-Scale. Likert-Scale is a psychometric response scale primarily used in questioners to obtain participant's preferences or degree of agreement with a statement or set of statements. It showed the level of agreement (from strongly disagree to strongly agree) with the given statement (items) on a metric scale (Bertram, 2009) . The questionnaires were distributed to 50 auditors in Public Accounting Firm in Solo. The questionnaires that were distributed were about the factors that affected in the making of audit quality. The target populations for this research were senior and junior auditors in Public Accounting Firm in Solo.

3.3 Research Variables and Measurement

3.3.1 Dependent Variable

The dependent variable was auditor performance. Auditor performance came from auditor attitudes and behavior. If it is viewed from the scope of work, a good quality

of audit performance can be seen by how the auditor use their characteristic in implementing auditing tasks using auditing standard and quality control standard which describe all best audit in practices (Nugrahini, 2015). The indicators of measurement of auditor performance variable were adopted from thesis done by Hapsoro (2019). It had 6 questions developed by Santy (2005) and the measurement of every statement was using scale developed by Likert Rensis. The scale was from (1) Strongly Disagree, (2) Disagree, (3) Neutral, (4) Agree, (5) Strongly Agree, if the answer is higher. If means that the value is higher.

3.3.2 Independent Variable

3.3.2.1 Auditor Independence

According to Burhanudin (2016), stated that the quality of audit is supported by how far the auditor independence could hold their action to not easily to influenced by others because public accountants carry out their work in the public interest. Being independent means avoiding relationships that can interfere with the mental attitude and appearance of the auditor in carrying out the audit.

The indicator of measurement of auditor independence variable were adopted from the research done by Burhanudin (2016). The indicators were independence in audit tenure, independence with the clients, and independence in reporting. The questionnaire used scaling system developed by Likert Rensis. The scale was from (1) Strongly Disagree, (2) Disagree, (3) Neutral, (4) Agree, (5) Strongly Agree. If the answer is higher, it means that by having higher value, the effect of auditor independence to auditor performance is higher.

3.3.2.2 Auditor Experience

Dewi (2016) stated in her research that the more extensive someone's in their work, their skill in their work place will increase. They will also be more perfect in reading the patterns while analyzing the data and their attitude would be much better to achieve the goals. An inexperienced auditor will make a greater error attribution than an experienced auditor. Thus, it can affect quality.

The indicator of measurement of auditor experience variable can be seen from the length or duration or work as an auditor and how many works that the auditor has done. The measurement will only ask about how long they have worked as an auditor, the option will be < 5 years, 5-7 years, 7-9 years, and > 9 years.

3.3.2.3 Auditor Competence

Auditor competence is the ability of auditor to finish their task properly and in-line with the audit standard. Pratomo (2015) in his research stated that those ability of competence can be achieved by having good personal quality, adequate knowledge, and special expertise in their field in order to produce good quality. Therefore, the quality of audit will increase and the performance of auditor. It can be seen from the auditor's opinion.

The indicator of measurement of auditor competence variables were implemented from thesis questionnaire done by Pratama (2015) an the questionnaire used scaling system developed by Likert Rensis. The scale was from (1) Strongly Disagree, (2) Disagree, (3) Neutral, (4) Agree, (5) Strongly Agree. If the answer is higher, it means that by having higher value, the effect of auditor competence on auditor performance is higher.

3.3.3 Moderating Variable

3.3.3.1 Religiosity

According to the research done by Winarsih (2018) Religiosity is the basic thing of someone who commits to implement the path of their life based on religion which is embraced in terms of behaving as individuals, acting and behaving. The indicators of measurement of religiosity variable were adopted from, Hastuti (2014) from 21 questions to 14 questions whether those religiosity factors could affect auditor performance or not. The questionnaire used scaling system developed by Likert Rensis. The scale is from (1) Strongly Disagree, (2) Disagree, (3) Neutral, (4) Agree, (5) Strongly Agree. If the answer is higher, it means that by having higher value, the effect of religiosity on auditor performance is higher.

3.4 Data Quality Test

Data quality test is used to measure whether the instruments of the question are valid and reliable or not. In this research, for the analysis, it used SPSS 22.0 to help analyzing the data collected from the respondents. The results of the processed data will determine the quality of the research results. There were several tests in this research:

3.4.1 Validity Test

Validity means how far the accuracy or tool to measure the accuracy in carrying out its measurement function (Rahman, 2016). Validity required valid item where this items will be used to represent the measurement that intended in the content area. Sampling validity will be used to know how far the test samples in content. A questionnaire is valid if the questions on the questionnaire were able to express and be measured. In this research, the validity test is measured by the correlation between the

scores of the question item with the total score of variables. A questionnaire is valid if r arithmetic > R Table.

3.4.2 Reliability Test

Reliability is an index that indicates the degree to measure two times of the same phenomenon and tools to measure of the stability consistency of test scores. It also shows the measurement of consistency on the same phenomenon (Rahman, 2016). Reliability is focusing on repeatability. Results of reliability test are used to determine whether the research instruments can be used repeatedly at different times. A reliability coefficient is a measure of how well a test measures achievement. Reliability is a very important factor in assessment, and is presented as an aspect contributing to validity and not opposed to validity. Reliability is the degree to which an assessment tool produces stable and consistent results.

3.5 Analysis Technique

The analysis technique used in this research are descriptive statistics test, classical assumption analysis, multiple linear regression, and hypothesis analysis. This analysis was done to measure the hypothesis and to know whether the independent variables and/or with moderating variable could affect the dependent variable.

3.5.1 Descriptive Statistics Test

3.5.1.1 Respondents Demography

In this research, descriptive statistics provided the explanation of the independent variable about auditor competence, auditor independence, and auditor experience. The results explained in the form of table and data analysis. The results were of the questions were based on the respondents' answer.

3.5.2 Classical Assumption Test

3.5.2.1 Multicollinearity Test

According to Joshi (2012), multicollinearity is statistical phenomenon in which there exists once had perfect or exact relationship among the predictor variables. If there is a perfect or exact relationship among the predictor variables, it is difficult to come up with reliable estimates of their individual coefficients. Paul (2008) in his research found that if there is no linear relationship among the regressions, they are said to be orthogonal. He also stated that multicollinearity is a matter of degree, not a matter of presence or absence. In presence of multicollinearity, the ordinary least Multicollinearity appears when two or more independent variables in the regression model are highly correlated. In the regression model, tolerance value and the opposite of the variance inflation factor (VIF) must be seen if we want to detect the presence or absence of multicollinearity.

3.5.2.2 Multicollinearity Test

Heteroscedasticity means unequal scatter. In regression analysis, it discusses heteroscedasticity with references to the residuals or mistake term. In particular, heteroscedasticity test is a test of assumptions that must be set so that the regression model that will use is not biased. All researchers are expected that distribution of data from time to time is always consistent and the condition of this is called as homoscedastic. To detect the heteroscedasticity, it is done by looking at the scatterplot graph between the prediction values of the dependent variable which is ZPRED with residual SRESID. Thus, Y-axis becomes the predicted axis and the X-axis is residual.

3.5.2.3 Normality Test

Normality test is a test used to determine whether data distribution is distributed or spread normally or not. It means that the data that has been collected from normal distribution or taken from a normal population. Parametric analysis is parameters of estimation of the observed population. Normality test use p-value in the Kolmogorov Smirnov valuation.

In SPSS, normality test uses p-value in the Kolmogorov Smirnov valuation. When the amount of p-value is bigger than 0.05 (>0.05), it means that the variables or the data are distributed normally and if the amount of the p-value is lower than 0.05 (<0.05), it means that the variables or the data are not distributed normally.

3.5.3 Multiple Linear Regression

Multiple linear regression is a technique to measure whether there any effect from the independent variable and/or with moderating variable to the dependent variable in this research.

$$AP = \alpha + \beta1 AI + \beta2 AE + \beta3 AC + \beta4 \ |AIxR| + \beta5 \ |AExR| + \beta6 \ |ACxR| + e$$

AP = Auditor Performance

α = Constant

$\beta1$-$\beta6$ = Regression Coefficient

AI = Auditor Independence

AE   = Auditor Experience

AC   = Auditor Competence

|AIxR| = Interaction between Auditor Independence with Religiosity

|AExR|= Interaction between Auditor Experience with Religiosity

|ACxR|= Interaction between Auditor Competence with Religiosity

e   = Error

3.5.4 Hypothesis Testing

The hypothesis testing in this research was done to know the effect of auditor independence, auditor experience, and auditor competence as the independent variable with religiosity as moderating variable toward the making or producing audit quality as the dependent variable. There were several hypothesis testing:

3.5.4.1 Coefficient of Determination Test

The coefficient of determination, R^2, is used to analyze the differences of one variable to another. By using this coefficient of determination or R^2, we can understand how strong the relation between the independent variable and the dependent variable. The range of R^2 is from 0 to 1. The greater the results are, the stronger the independent variable could affect the dependent variable.

3.5.4.2 T-Test

T-test is a type of statistical test that is used to compare the two groups. It is one of the most widely used statistical hypothesis tests in studies. T-test is a type of parametric method. It can be used when the samples satisfy the conditions of normality, equal variance, and independence (Kim, 2015). The significant I ever used to be going to be

5% or 0.05. If the significant level of the hypothesis is smaller than 0.05 or 5% (<5%), the hypothesis can be accepted. However, if the significant level of the hypothesis is greater than 5% or 0.05 (>5%), the hypothesis should be rejected.