

CHAPTER III

RESEARCH METHODOLOGY

A. Research Object/Subject

The object of this research was the BPJS Ketenagakerjaan in Central Java and Special Region of Yogyakarta. The subjects in this study were top management, namely head of branch, secretary of branch, head of finance department, head of information and technology department, head of marketing department, head of general department, and head of services department from each BPJS Ketenagakerjaan's office in Central Java and Special Region of Yogyakarta. BPJS Ketenagakerjaan's office in Central Java and Special Region of Yogyakarta are located in some areas, namely Semarang Region Office, Semarang I, Semarang II, Yogyakarta, Surakarta, Kudus, Ungaran, Tegal, Magelang, Cilacap, Purwokerto, Klaten, and Pekalongan.

B. Type of Data

This type of research used quantitative research methods. The data used was primary data. Primary data is data that refers to information obtained from the first hand by researchers relating to the variable of interest for the specific purpose of the study. Primary data can be divided into questionnaire method or interview method. Primary data sources can be from individual

respondents, focus groups, and the internet where the questionnaire is distributed (Sugiyono, 2012).

Primary data in this study obtained by researchers used the instrument in the form of questionnaires given to the respondents. The questionnaire is a set of questions arranged in an orderly and structurally to get respondents' answers. Primary data in this research was questionnaire distributed to the respondents about the business strategy influence management control system.

C. Sampling Technique

The sampling technique in this research used purposive sampling technique based on consideration of objectives and research problem. Purposive sampling is a nonprobability sampling design in which the required information is gathered from special or specific targets or groups of people on some rational basis. In other words, purposive sampling is also understood as a technique to take the sample (not based on random, regional, or strata) based on the considerations that focus on a particular goal (Sekaran and Bougie, 2016).

D. Data Collection Technique

Data collection in this research used survey method with questionnaire instrument. The questionnaire consisted of three parts. The first part consisted of questions about the business strategy, the second part about firm

performance, and the third section about management control system. The questionnaires have been completed with simple and concise questionnaire filling instructions so that the respondents can understand the systematics of the questionnaire.

Beside using survey method, this research also used literature study. This method was used to describe theoretical references in literature review using the deductive analysis of the theory and based on the opinions of experts gleaned from reliable and supportive sources. Study libraries use sources that derive from valid data and have a correlation with the research topic (Jogiyanto, 2014)

E. Operational Definition of Research Variables

This research involves three variables consisting of an independent variable (free), a dependent variable (bound), and an intervening variable. Dependent variable is the variable that become the focus in research while the independent variable can be defined as a variable which influencing the dependent variable. Therefore, the intervening variable explains causal links the independent variable affects the dependent variable. The independent variables in this study is business strategy, while the dependent variable is firm performance, and the intervening variable is management control system (Sekaran & Bougie, 2016).

1) Independent Variable

a) Business Strategy

Business strategy is a strategy that focuses on long-term and broad questions about what business that organization will develop and what business goals that it may achieve in the business (Coulter, 2012). In addition, business strategy is defined as how competitive advantage will be achieved by a business. It has been recommended that the management control system should be explained clearly in maintaining the business strategy which could lead to a greater performance (Acquaah, 2013; Tsamenyi, Sahadev, & Qiao, 2011; Henri, 2006).

Independent variable was measured using the questionnaire. Researcher designed the questionnaire indicators that were built based on Karsam's questionnaire (2017). Overall, this variable was observed through nine questionnaire statement items applying Likert scale. The business strategy variable referred to the theory of Coutler (2012) which adjusted with the BPJS Ketenagakerjaan's Strategic Plan of 2014-2018 (2018). For business strategy variable measured by three dimensions, namely differentiation, low cost, dan focus strategy (Coulter, 2012).

2) Dependent Variable

a) Firm Performance

The main objective of applying strategy is to increase firm performance. Firm performance commonly referred to an indicator of the level of success in achieving firm goals (Zott and Amit, 2008).

Firm performance is an indicator of organizational performance measurement seen from financial and non-financial measures (Lekatompessy, 2012). This research took the resolution and dimensions of performance as the dependent variable in Widener (2007), namely organizational performance seen in four dimensions, namely overall performance, overall profit, market valuation and productivity. This variable consisted of nine questionnaire statement items applying Likert scale.

3) Intervening Variable

a) Management Control System

Anthony and Govindarajan (2007) states that the management control system are tools to implement strategies. Strategies differ between organizations, and controls should be tailored to the requirements of specific strategies. Different strategies require different task priorities; different key success factors; and different skills, perspectives, and behaviors. Thus, a continuing concern in the design of control systems is definition for strategy.

To measure the dependent variable in this study, the researcher used a questionnaire instrument. The researcher designed indicators that were arranged based on theoretical studies and previous research. Overall, this variable consisted of 16 questionnaire statement items applying Likert scale. In this research, the independent variable was measured based on a questionnaire developed by Karsam (2017). The theory that forms the basis of measurement is to use two main dimensions of the management control system, namely the management control structure and the management control process (Anthony, and Govindarajan, 2007; Marciello and Kriby, 1994).

F. Instrument and Data Quality Test

1) Descriptive Statistic

According to Sugiyono (2012), descriptive method is a method of examining the status of a group of people, an object, a condition, a system of thought, or an event in the present. Sekaran & Bougie (2016) added that the descriptive method is conducted to find out and to explain the characteristics of variables examined in any situation. In addition, descriptive statistics is a process of transforming research data in the form of tabulation of the respondent's data obtained from the questionnaire and its explanation so that it is easy to interpret. This research used three

parameters in describing the condition. The three parameters were the range of scores (maximum and minimum), mean, and median.

2) Data Quality Test

a. Validity Test

An instrument is declared valid if it is able to measure what is desired and can reveal data from variables that are examined appropriately. Validity testing is a test intended to find out whether the data can be trusted the truth and in accordance with reality. Therefore, a valid instrument means that the measuring instrument used to obtain data is valid. Valid means that the instrument can be used to measure what should be measured. Validity test conducted in this study used item analysis that is correcting the score of each item with a total score which is the sum of each item score. If there are items that do not meet the requirements, the item will not be further investigated (Sugiyono, 2012).

b. Reliability Test

According to Bhuono (2005), reliability is a measure of whether the respondent is stable or not in terms of answering things about the construction of questions that describe the pattern of variables arranged in the questionnaire. In addition, the reliability of the questionnaire depends on the respondent's answer regarding the statement is considered consistent and stable from one time to the

next and is also able to produce the same answer if it is done by individuals or at different times. Reliability test used Cronbach's alpha. If the value of Cronbach's alpha > 0.6 , then the variable can be said to be reliable (Sekaran & Bougie, 2016).

G. Classic Assumption Test

1) Normality Test

According to Santoso (2012), the normality test aims to test whether the sample is used have normal distribution or not. In linear regression models, this assumption is indicated by an error value that is normally distributed. Regression model is a regression model that has a normal distribution or is approaching normal. Hence, it is feasible to do statistical testing. Testing normality of data using the Kolmogorov-Smirnov Test of Normality in SPSS program. The basis for taking decisions can be made based on probability (Asymtotic Significance), that is:

- 1) If the probability is > 0.05 , the distribution of the regression model is normal.
- 2) If the probability is < 0.05 , the distribution of the regression model is not normal.

2) Multicollinearity Test

Multicollinearity test is used to test whether the regression model found the presence or absence of correlation between independent variables. If there is a correlation, there is a multicollinearity problem.

A good regression model should not occur between independent variables. If it is proven that there is multicollinearity, it is better if one of the independent variables is removed from the model, then making the regression model (Santoso, 2012).

To detect the presence or absence of multicollinearity, it can be seen from the amount of Variance Inflation Factor (VIF) and Tolerance. The guidelines for a multicollinearity-free regression model are having tolerance numbers close to 1. The VIF limit is 10, if the VIF value is below 10, there is no multicollinearity symptom. To detect the presence or absence of multicollinearity can be seen from the amount of Variance Inflation Factor (VIF) and Tolerance. The guidelines for a multicollinearity-free regression model are having tolerance numbers close to 1. The VIF limit is 10, if the VIF value is below 10, then there is no symptom of multicollinearity (Gujarat & Porter, 2012).

3) Heteroscedasticity Test

Gujarat and Porter (2012) states that heteroscedasticity test aims to test whether in a regression model, there is variance or residual inequality from one observation to another observation. To test whether there is heteroscedasticity, Spearman's rank-test was used by correlating the independent variables to the absolute value of residuals (errors). The also explain that to detect the symptoms of heteroscedasticity test, a regression equation was made assuming

that there was no heteroscedasticity and then determined the absolute value of the residuals, then the absolute residual value is obtained as the dependent variable and regression of the independent variables. If the value of the correlation coefficient is between the independent variables and the absolute value of significant residuals, then the conclusion is heteroscedasticity (variants of residuals are not homogeneous).

H. Hypothesis Test

The hypothesis test in this research used multiple regression analysis method referring to Sugiyono (2012). The equation of multiple regression analysis are:

a. T-Test

T-Test measures the regression coefficient partially. This test is done to determine the significance of the role partially between the independent variables on the dependent variable by assuming that other independent variables are considered constant. Hypothesis criteria is accepted if the sig $< \alpha$ value is 0.05 and the regression coefficient is in line with the hypothesis (Sugiyono, 2012).

b. F-Test

Sugiyono (2012) states that F-Test measures the regression coefficient simultaneously. This test is conducted to determine the effect of all independent variables contained in the model

simultaneously on the dependent variable. Hypothesis criteria is accepted if the sig $< \alpha$ value is 0.05 and the regression coefficient is in line with the hypothesis.

c. Determination Coefficient Test

The determination Coefficient Test or R^2 aims to determine the magnitude of the proportion of the effect of the independent variable on the dependent variable. The coefficient of determination is used to show the percentage of the prediction correctness level from the regression tests performed. The value of R^2 has a range between 0 and 1. If the value of R^2 approaches 1 (the greater the value of R^2), it means the independent variable is greater in explaining the variation of the dependent variable (Nazaruddin and Agus, 2015).

The adjusted R^2 value is the value that has been adjusted. The regression that uses more than 2 independent variables using adjusted R^2 as the coefficient of determination (Priyatno, 2013). The determination testing can be seen from the adjusted R Square in the test table of the coefficient of determination (R^2). The adjusted R Square value shows the percentage (%) variation of the dependent variable which can be explained by independent variables. Meanwhile, the rest of the percentage in the adjusted R Square is explained by other independent variables that were not present in this research.

d. Path Analysis

In testing this research, a path analysis model with the Statistical Package for the Social Sciences (SPSS) program was employed. The picture below shows that there is a relationship in each path between independent and intervening, independent and dependent or intervening and dependent. In explaining those relationship, regression analysis is used. Path analysis is used to estimate direct and indirect relationships, with a 95% confidence level or α : 5%. The path coefficient is the standardized regression coefficient.

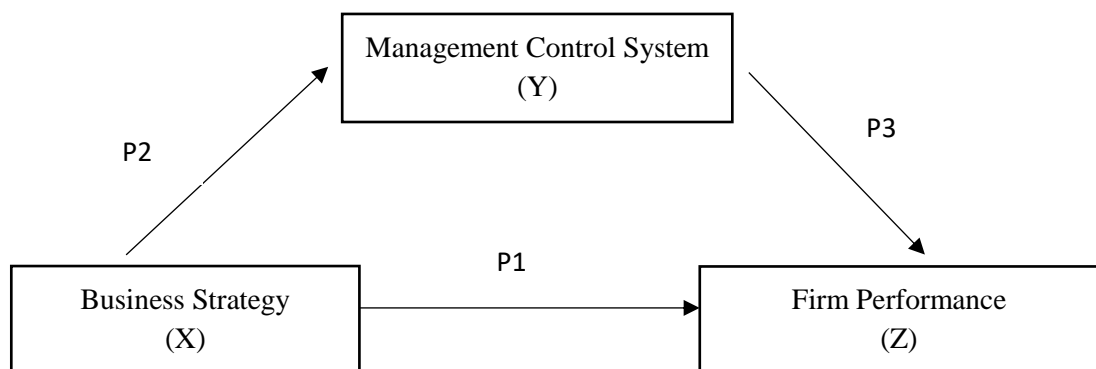


Diagram 2. Structure of Path Analysis

These regression analyses are divided into two models of regression test, they are:

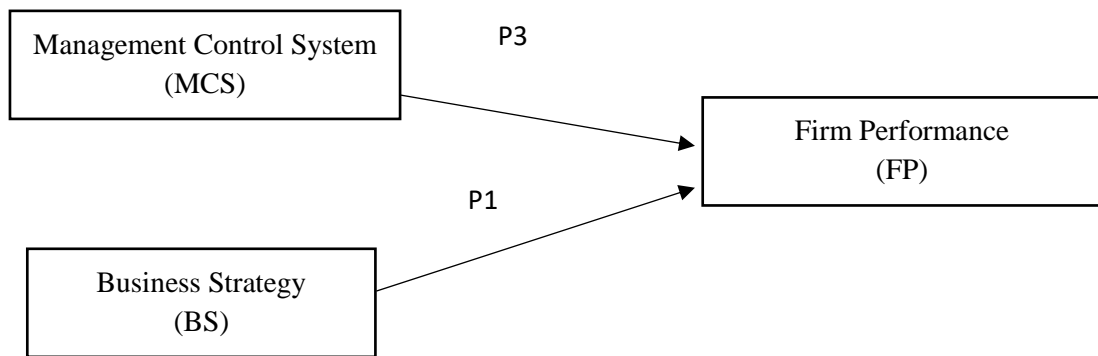


Diagram 3. Regression Model of Substructure 1

Hypotheses Test for H1

$$FP = \alpha + \rho_1 BS + \rho_3 MCS + \varepsilon \dots\dots\dots (H1, H2)$$

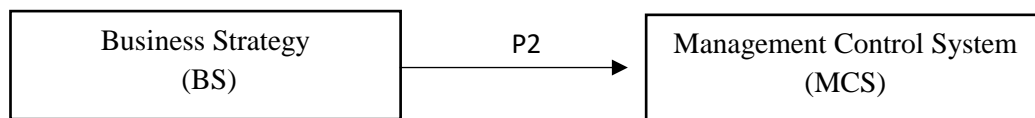


Diagram 4. Regression Model for Substructure 2

Hypotheses Test for H2

$$MCS = \alpha + \rho_2 BS + \varepsilon \dots\dots\dots (H2)$$

In both substructure, multiple regression testing was conducted. Each test is seen how big the adjusted R square is, which shows how much the independent variable is to explain the dependent variable. Meanwhile,

the two sub-structures were tested using the T-Test to find the partial effect of the independent variables on the variables dependent. Therefore, the results will be known for each hypothesis proposed. Hypothesis is acceptable if it meets these several requirements:

- a. If $\text{Sig} < \alpha$ and the coefficient ρ are positive, then the hypothesis is accepted.
- b. If $\text{Sig} < \alpha$ and the coefficient ρ are negative, then the hypothesis is rejected.
- c. If $\text{Sig} > \alpha$, then the hypothesis is rejected.