CHAPTER III
RESEARCH METHOD

3.1 Research Variables Operational Definition

The variables of this study consist of three types of variables, namely independent variable, dependent variable, and moderating variable. Independent variables of this study are budget participation and budget emphasis and the dependent variable is slack budget. The moderating variable used in this study is organizational commitment. The variables of this study are explained further in the next section below.

3.1.1 Independent Variables

The independent variable in this study is budget participation and budget emphasis. According to Anthony and Govindarajan (2007) in Sinaga (2013), budget participation is the process by which the compiler has an influence in determining the amount of budget. Budgetary participation measured using instruments developed by Rukmana (2013) with five (5) questions on scale 1 to 6 where (1) stated strongly disagree and (6) stated strongly agreement.

Budget emphasis is a tendency to achieve goals in the easiest way (Lowe & Shaw, 2968). Budget emphasis measured using instruments developed by Hopwood (1972) in Triana et al. (2012) with eight questions on scale 1 to 6 where (1) stated strong disagreement and (6) stated strong agreement.
3.1.2 Dependent Variable

Budgetary slack is a dependent variable in this study. According Young (1985) in Syahputra, et al (2018), slack is a subordinate action that understates its productive capability when given the opportunity to determine its standard of work. The tendency to do budgetary slack is measured by an instrument developed by Dunk (1993) quoted from Ardila (2013) as follows:

1) Determining standards in the budget produces high productivity in the unit of accountability.
2) Budget target in the unit of responsibility can be both difficult or easy to achieve.
3) The existence of budget constrains or not in expenditure on the unit of responsibility.
4) The existence of budget target can increase efficiency or not.

The measurement scale used for this variable is with six of question on scale 1 to 6 where one stated strongly disagreement and six stated strongly agreement.

3.1.3 Moderating Variable

Organization commitment is encouragements from a manager do something in order to support the success of the organization in accordance with the objectives to prioritize the interests of the organization. Operational commitment can grow due to individuals having an emotional bond to the organization which includes moral support,
values acception that exist in the organization and self determination to serve the organization (Poerter et al., 1974 in Kartika, 2010). To measure organizational commitment used 9 question items that have been used by Mowday (1979) quoted from Asriningati (2006) using the Likert scale 1-6.

3.2 Population and Sample

The population is a generalization area consisting of subject and objects which have certain qualities and characteristics that have been determined by researchers to be studied and conclusions to be drawn (Sugiyono, 2014). The population of this research is the Regional Work Unit (SKPD) of the Bengkulu City Government. In this case, SKPD as the executive is actively involved in the budget from planning to report.

This study uses samples that can represent the population as a whole. The method used in determining the sample of this study was purposive sampling. Purposive sampling is a deliberate sampling technique based on certain criteria determined by the researcher. This sampling technique was also chosen to avoid bias in research and so that the results were more representatives (Sugiyono, 2014).

The sample criteria in this study were the head of the field, section head, and finance subdivision head of the department, agency, and sub-district on the some of SKPD in Bengkulu City and Seluma Districts consisting of the Department of Education, Department of Population and Civil Registration, Department of Public Works, Housing, and Settlement
Areas, Office of Culture, Department of Transportation, Social Service, Office of Industry and Trade, Office of Cooperatives, SMEs, Labor and Transportation, Agriculture and Food Service, Tourism Office, Defense and Spatial Service, and Youth Sports Service. The SKPD was chosen because each of them was actively involved in budget participation through the creation of work programs that used the budget as a planning and control tool. In addition, the selection of the SKPD was carried out on the grounds that the three agencies had an important role in preparing, using, and reporting on the realization of the budget or actively implementing the budget from the local government.

Sugiyono (2014) explained to determine the number of samples in multivariate (correlation or multiple linear regression) is to multiply 10 times the variable studied. In this study, there were a total of four variables then multiplied by 10 (ten) so that in total there are 40 minimum samples must be fulfilled.

3.3 Type and Source

The data source that will be used in this research are primary data in the form of respondents’ answer to items of question contained four research instrument, such as budgetary slack, budget participation, budget emphasis, and organization commitment. Based on the answer contained in the questionnaire, data will be obtained that describes the attitudes and involvement of respondents during preparing budget. The type of data in this study is the type of subject data obtained in the form of opinions,
attitudes, experience, and characteristics of respondents who become the subject of this study.

3.4 Method of Collecting Data

Data collection in this study is employing the survey method, where research data is collected using questionnaires and data obtained directly from respondents. Data collection is done by distributing questionnaires to each SKPD. There are 12 SKPD, which are the object of research with a total of 50 questionnaires to be distributed. The questionnaire was distributed to some departments consisting of the Department of Education, Department of Population and Civil Registration, Department of Public Works, Housing, and Settlement Areas, Office of Culture, Department of Transportation, Social Service, Office of Industry and Trade, Office of Cooperatives, SMEs, Labor and Transportation, Agriculture and Food Service, Tourism Office, Defense and Spatial Service, and Youth Sports Service. For each SKPD four questionnaires were distributed. Three of them address for heads of fields / sections, while one of them is to financial subdivision head.

The questionnaire was distributed directly to each SKPD and then for the return taken by the researcher at the specified time. The questionnaire contains questions with several alternative answer choices, where respondents are asked to answer questions in the form of interval scale so that they can measure the respondent's response to the questions.
that have been asked. The list of questions is taken from some of the literature that has been tested. The alternative answers provided are:

1 = Strongly Disagree
2 = Disagree
3 = Rather Disagree
4 = Rather Agree
5 = Agree
6 = Strongly Agree

3.5 Analysis Method

Data analysis in this study is carried out using linear regression analysis multiple with the help of an application called SPSS (Statistical Package for Social Sciences). Previously, a test was conducted on the quality of the data through testing validity and reliability to then do the classic assumption test, analysis multiple linear regressions, coefficient of determination, and hypothesis test.

3.5.1 Statistic Descriptive

This statistic aims to provide an overview of the demographics of respondents who indicate their level of education, gender, length of work and age of the respondent. Whereas to give a description of the character of the research variables, the researcher used a distribution table that shows the mean, median,
range and standard of deviation. According to Hamdi and Baharuddin (2014), descriptive method is a research method which purposed to describe the phenomenon in the past and current condition, not only describe the condition but also the development of a condition. Nazir (2005) stated that descriptive method is a research which used to examine a group of people, object, a certain condition, a systematical thinking, or a class of occurrence of current condition then discussed systematically factual and based on the facts and the characteristics of the relationship of the phenomena being observed.

3.5.2 Data Quality Test

3.5.2.1 Validity Test

Validity test is done with the aim to determine the extent to which the accuracy of a measuring instrument in determining the measurement functions. The approach is done by calculating the correlation between the scores of each question with the total score studied using product moment correlation techniques from Pearson correlations. The Pearson correlation is said to be positive and significant at the 0.05 level.

3.5.2.2 Reliability Test

Reliability test is intended to determine the minimum level of trust that can be given to the sincerity of the answers received. The reliability test of the research instrument was carried out by
examining the consistency of Cronbach alpha coefficients for all variables. According to Nunnaly (1978) in Ghozali (2013), the research instrument is said to be reliable (reliable) if Cronbach alpha is more than 0.6.

### 3.5.3 Classic Assumption Test

The classic assumption test is used for research using methods multiple regression. This test is done to test whether the data meets classical assumptions and to avoid biased estimation parameters (Ghozali, 2013).

#### 3.5.3.1 Normality Test

The normality test is done to find out whether in the regression model, the variables have a normal distribution (Ghozali, 2013). Normally distributed data will minimize the possibility of bias. According to Ghozali (2013) normality testing can be conducted by using the statistical test Kolmogorov Smirnov. If the result of the Kolmogorov Smirnov test is above the confidence level of 5% or 0.05, it is indicated a normal distribution pattern, it means the regression model meets the assumption of normality. However, if Kolmogorov Smirnov's result is below the 5% confidence level it does not show a normal distribution pattern, and the regression model does not meet the assumption of normality.
3.5.3.2 Heteroscedasticity Test

This test is done to test whether in a regression model there is a variance inequality from the residual one observation to another observation. The method used is the *Glejser* test. The data in which there is no heteroscedasticity is the one that has a significance value which is above the confidence level of 0.05 (> 5%) (Ghozali, 2013). If the variant of residual one observation with other observations are fixed, it is called heteroscedasticity and if the variant of residual is resulted from two different observations, it cannot be called heteroscedasticity.

3.5.3.3 Multicollinearity Test

This test is carried out to test whether in the regression model it is found correlation among independent variables (Ghozali, 2013). In a good regression model, there should be no correlation among independent variables. To detect the presence or absence of multicollinearity in the regression model, it can be seen from the tolerance inflation factor (VIF). As a reference basis, it can be concluded:

a) If the tolerance value is > 0.10 and the VIF value is < 10, it can be concluded that there is no multicollinearity between the independent variables in the regression model.
b) If the tolerance value is <0.10 and VIF value is > 10, it can be concluded that there is multicollinearity between independent variables in the regression model.

A good regression that is a regression model that is non-multicollinearity means that between one independent variable and another in the regression model is not perfectly interconnected. If a regression model contains multicollinearity, the standard error of estimation will tend to increase the independent variables. If multicollinearity occurs in a regression model, steps can be taken as follows:

1) Issue one of the variables that has a strong correlation

2) Create a new variable, which is a combination of variables that correlate strongly and use new variables instead.

3.5.4 Analysis of Multiple Linear Regressions

According to Gujarati in Ghozali (2013), regression analysis is the study of dependent variables with one or more independent variables with the aim to estimate or predict the average of the dependent variable based on the value of the known independent variable. The accuracy of the sample regression function in estimating the actual value can be measured from the goodness of fit. Statistically, at least it can be measured from the value of the coefficient of determination ($R^2$), the statistical value F and the value of statistics t. Statistical calculations are called statistically
significant if the statistical test value is in a critical area (the area where H0 is rejected) (Ghozali, 2013).

The interaction test or often called Moderated Regression Analysis (MRA) is a special application of linear multiple regression where the regression equation contains an element of interaction (Ghozali, 2013) with the formula:

\[ Y = a + b_1X_1 + b_2X_2 + e \]

\[ Y = a + b_1X_1 + b_2X_3 + b_3X_1^*X_3 \]

\[ Y = a + b_1X_2 + b_2X_4 + b_3X_2^*X_3 \]

Information:

- \( Y \) = Budgetary Slack
- \( a \) = Constants
- \( b_1-b_3 \) = regression coefficient
- \( X_1 \) = Budget Participation
- \( X_2 \) = Budget Emphasis
- \( X_3 \) = Organizational Commitment
- \( e \) = Residual errors

### 3.5.4.1 T-Test

According to Ghozali (2013), t-test is used to test how far the influence of the independent variables used in this study
individually in explaining the dependent variable partially. The basis for decision making used in the t test is as follows:

1) If the significance probability value is > 0.05, the hypothesis is rejected. The rejected hypothesis means that the independent variable has no significant effect on the dependent variable.

2) If the probability of significance is <0.05, the hypothesis is accepted. The irrevocable hypothesis means that the independent variable has a significant effect on the dependent variable.