

# Roles of Budgetary Participation on Leader's Performance: A Study Case in Ternate

Abd. Wahab Hashim<sup>1</sup>, Imam Hanafi<sup>2</sup>, Anwar Fitrianto<sup>3,4</sup> & Herman Darwish<sup>1</sup>

<sup>1</sup> Faculty of Economics, University of Khairun, Ternate, Indonesia

<sup>2</sup> Faculty of Administrative Science, University of Brawijaya, Malang, Indonesia

<sup>3</sup> Department of Mathematics, Faculty of Science, Universiti Putra Malaysia, Malaysia

<sup>4</sup> Department of Statistics, Faculty of Mathematics and Natural Resources, Bogor Agricultural University, Indonesia

Correspondence: Anwar Fitrianto, Department of Mathematics, Faculty of Science, Universiti Putra Malaysia, Mathematics Building, Serdang Selangor 43400, Malaysia. E-mail: anwarstat@gmail.com

Received: March 5, 2014 Accepted: April 1, 2014 Online Published: May 26, 2014

doi:10.5539/ass.v10n12p35

URL: <http://dx.doi.org/10.5539/ass.v10n12p35>

## Abstract

This study aims to analyze the relationship between budgetary participation with leadership performance. The population of this study was under the leadership of mid-level and intermediate level on SKPD (Regional Work Unit) Ternate. Random sampling techniques use proportional sampling and analytical methods used are factor analysis. The research proves that the higher the participation in the preparation of the budget will further improve the performance of the leadership. Meanwhile, budget goal commitment does not affect the relationship between budgetary participation with leadership performance, this is because the possible existence of distrust to achieve budget targets.

**Keywords:** participation, budget goal commitment, leadership performance

## 1. Introduction

Basically participation is a natural process in an organization, where individuals are directly involved in making decisions that will affect him. According to Argyris (1952), the largest contribution to the budget process would occur if the subordinate involved participating in the preparation of the budget, because the involvement of subordinates in the budgeting process is the main factor that distinguishes between the participatory budget and non-participatory budget (Milani, 1975).

Budgeting system in public sectors have been applied since the autonomous region has implemented a decentralized system rolling. This is happened in the process of preparing the budget part of the authorities in making decisions. Hill (1998) stated that decentralization is a wide distribution or shifting of authority in the decision making for the lower management level. According to Brownell and McInnes (1998), in an organization with low level decentralization, manager feel that he's considered as less responsible, less involved in the budget arrangement, and feel the pressure from the higher up. They also said that budget is a something less useful and restrain their discretion.

Based on the theory of goal setting, participation will increase subordinate commitment to the goals of the budget targets (Chong, V. K., & Chong, K. M., 2002). Opportunity to engage and influence the budgeting process will increase the confidence of the subordinate, subordinate control feelings, and ego involvement with the organization. All together will lead to less resistance to change and more accepted and chose the commitment to budget decisions.

The achievement of budget targets is a managerial achievement, given that the budget includes the organization's goals. Subordinates who have a commitment to the goals of the budget will be motivated to increase his efforts to acquire and use relevant information to support decision making. The use of relevant information by subordinates will improve the performance of the subordinates. Participation in the budgeting process works to convince subordinates to accept and commit to their budget targets (Chong, V. K., & Chong, K. M., 2002). Commitment is the effort to achieve the budget targets and constantly strive to achieve it all the time, Locke et al.

(1986). Commitment is a strong belief in and supports the values and goals (goal) that individuals in the organization wants to achieve. If there is no commitment, then the target will be difficult to achieve.

## 2. Literature Reviews

Several findings regarding the relationship between budgetary participation and managerial performance were done by many researchers, including Bryan and Locke (1967). They began work on a series of experiments that hypothesize goal setting as a means of increasing motivation. They showed through a series of laboratory experiments that specific hard goals produce a higher performance level than a goal of "do your best." Unfortunately, they found that the relationship between participatory budgeting and managerial performance cannot be concluded conclusively. Meanwhile, Milani (1975) discovered that there is a negative effect of budget participation on the performance leader. Some other researchers, such as Brownell (1982), Brownell and McInnes (1986), Frucot and Shearon (1991), have conducted research on the effects of budgetary participation on performance management. In those articles they found a positive relationship between participatory budgeting and managerial performance.

Some recent articles regarding budgetary participation and managerial performance were done by Fauziati, (2002), Enderwati (2004), Darma, (2004). In general, they found positive relationship between budgetary participation and managerial performance. From the empirical evidence presented above, the formulation of hypotheses developed in this study is as follows: budgetary participation affects the performance leader. Research about budget participation to the performance has various results. This study focuses on how the budget participation influences the leader's performance, using the moderating variable.

Govindarajan (1986) suggested that to resolve difference research findings, it can be done by contingency approach. This approach is done by systematically evaluate a range of conditions or variables that can affect the relationship between budgetary participation with leader performance. A study using the contingency approach to moderate variables of decentralization was carried out by Gul et al., (1995).

A research which was conducted by Chong, V. K., & Chong, K. M. (2002) found that the budget goal commitment have significant effect on managerial performance in the service/local government agencies. The results of their research indicated that the decentralization and budget commitment goal can be used as moderating variables (contingency), that is the variables that may moderate the relationship between budgetary participation and managerial performance of agencies/local government agencies. Bahrul, (2002) showed that participation in the preparation of the budget provides an opportunity for leaders and staff down to negotiate with their employer about the possibility of budget targets which can be achieved and more realistic. Meanwhile, Adi (2006) found that budgetary participation and leader's performance have positive influence on the performance within the organization whose authority delegation is decentralized. Recent study was done by Eker and Eker (2009) about relationship between organizational culture and performance measurement systems (PMS) in the context of the Turkish Business environment. They found that firms with a flexible culture tend to use non-financial performance measures, and use PMS for aims such as organizational attention-focusing and supporting strategic decision-making more than firms which have a control culture.

Based on the description of this background, we formulate research problem statement as follows: whether budgetary participation affects the performance of the leader in Ternate city? In this article we want to provide empirical evidence of the influence of budgetary participation on performance management. Becker (1978) suggested that participation is a process of taking decision shared by two or more parties that will take effect in the future for the decision making.

## 3. Data and Methodology

### 3.1 Data Source and Determining Sample Sizes

In this study, we use both primary and secondary data. The primary data are collected using questionnaires respondents. Meanwhile, for the secondary data, we use documentary techniques, namely by taking the existing data on local government which includes organizations characteristic data from public sectors and other data required in the study. The research was conducted at the district unit of education section in the region of Ternate city. The area consists of 24 organizational units which then can be divided into 2 units of the secretariat, 16 office units and 6 agencies.

The population of this study is heads of regional working units (RWU) at middle and lower level at Ternate city. There are a total of 364 heads of RWU, 105 of them are RWU heads at medium level and 259 are RWU heads at lower levels. The medium levels of RWU heads consist of administrative chiefs, division chiefs. Meanwhile, lower level RWU heads consist of chiefs of sub areas/sub-section chiefs/section chiefs.

With regard to sample size,  $n$ , we calculate it according to Slovin formula as cited by Sevilla et al., (1997):

$$n = \frac{N}{1 + N e^2} \quad (1)$$

According the formula of Equation (1), the sample size needed for this study is:

$$n = \frac{N}{1 + N e^2} = \frac{364}{1 + 364(0.01)} = 78.45 \approx 78 \quad (2)$$

Next, the sample is determined from each RWU using proportional random sampling with the following equation:

$$n_j = \frac{N_j}{N} \times n \quad (3)$$

where:

$N$  = population size,

$n$  = sample size,

$e$  = margin of errors.

$N_j$  = population size at  $j$ th RWU,

$n_j$  = sample size at  $j$ th RWU.

### 3.2 Variable Definitions and Measurement

The study was designed as an empirical research. To perform the test hypothesis proposed, examined variables that need to be measured. The independent variable in this study is budgetary participation, moderating variables of decentralization, Budget goal commitment, and job-relevant information. The dependent variable in the study is the performance of the chairman. All calculations and statistical analysis would be conducted by using SPSS for Windows release 11.5. Here are some descriptions of several variables mentioned above:

a) Budget Participation: Involvement that includes the provision of consideration and proposals of subordinates in decision making, preparing budgets and revisions. Respondents were asked to answer five questions that measure the level of participation in the budget process in a 7-point scale, with a scale of 1 indicates low participation, and the scale of 7 indicates high participation.

b) Job Performance, which is the result of work which can be achieved by heads of working unit in the middle to lower levels in the Ternate, in accordance with the authority and responsibilities of each. The performance will be measured using performance indicators adapted to the conditions and scope of work organization. Indicators used are indicators of inputs, outputs, outcomes, benefits, and impact are measured by seven-point scale, with scale (1) strongly agree, and scales (7) strongly disagree.

## 4. Results

In this research, we obtain perfect response rate of 100% from respondents which enable us to obtain steadfast statistical analysis especially for validity analysis, reliability analysis as well as a regression analysis.

### 4.1 Test for Research Instrument

#### 4.1.1 Validity Test

Confirmatory Factor Analysis (CFA) Measurement Model is conducted to investigate uni-dimensionality of the indicators that explain a particular factor or a latent variable. It is done by observing the amount/value of loading factors. Loading factor or lambda value is used to evaluate the compatibility, suitability, or uni-dimensionality of the indicators or variables. Common rule for loading factor is that if the value of loading factor from the indicator less than 0.40, that particular indicator is dropped and will not be used in the next test. The result of CFA test can be observed in Table 1.

Table 1. Results of confirmatory factor analysis for the study

Variable	KMO & Bartlett Test			Total Variance Explained		Rotated Component Matrix
	KMO	BTS Chi-square	Sig.	Component	Loading	Total Component
Performance	0.682	263.260	0.000	5	82.791%	2
Budget Participation	0.682	141.446	0.000	4	65.756%	1
Decentralization	0.634	135.711	0.000	8	65.701%	3
Budget Goal Commitment	0.643	49.481	0.000	4	49.462%	1

Based on the results of CFA tests above, the value of Kaiser-Meyer-Okin (KMO) of each variable is more than 0.40. It satisfies the assumptions of factor analysis and reliable. From the table we can also see that all values of Bartlett's test of Sphericity (BTS) show significant contributions. Since all  $p$  values are less than any reasonable alpha. Since both KMO and Bartlett tests are met, and then we can continue further analysis Factor Analysis. The results of factor analysis, we can see that two factors are formed based on the 5 indicators of performance variables. The two factors have the loading factor value of 82,791% which means that the two factors can explain the variability of performance variables by that amount.

For budget participation variables, using the same criteria of eigenvalues (more than 1), four indicator variables develop one factor with value loading factor = 65.756%. Meanwhile, for decentralization variables, eight indicators are formed in 3 factors with a value loading factor of 65.701 %, which means that all three of these factors can explain the decentralized variable with the variation of 65.701%. For budget goal commitment variables, four indicators are formed in the first factor with value loading factor of 49.462 %. We also found that based on rotated factor analysis, each construct has uni-dimensionality or in other words all of the indicators used to have a strong explanatory factor so it is concluded that each item score is a valid question.

#### 4.1.2 Reliability Test

Reliability test is done by calculating Cronbach alpha to test the feasibility of the consistency of all scales used in the questionnaire. An instrument is said to be reliable if it has Cronbach alpha more than 0.4 (Nunnally, 1967). The result of reliability test can be viewed in Table 2.

Table 2. Results of the reliability test

Variable	Cronbach Alpha
Leader's performance	0.6826
Budget Participation	0.8247
Decentralization	0.5560
Budget Goal Commitment	0.7182

Table 2 shows that all the variables are tested. Since all values of Cronbach alpha are greater than 0.4, we can say that these variables are valid and reliable. Thus all the question items are eligible for analysis.

#### 4.2 Classical Assumptions Checking

In this section we provide necessary assumptions for the analysis such as multicollinearity and independency. The result of multicollinearity test can be seen in Table 3. The result of tolerance value calculation indicates that there is no multicollinearity problem between independent variable since all the Variance Inflation Factor (VIF) values are less than 10.

Table 3. Multicollinearity test for the study

Information	Variable	VIF
1st Equation	Budget Participation (BP)	1.100
	Decentralization (DS)	1.100
	Interaction between BP and DS	1.025
2nd Equation	Budget Participation (BP)	1.786
	Budget Goal Commitment (BGC)	1.173
	Interaction between BP and BGC	1.584

Meanwhile, for testing autocorrelations, we use Durbin Watson test. Result for the checking for auto correlation is displayed in Table 4. From the values of the  $dl$  and  $dl$  in the table we can see that there is no serial correlation between the disturbance terms, so it means that the variables are independent (no autocorrelation) since  $du < DW < 4-du$ .

Table 4. Autocorrelation test in the study

Model	$dl$	$dl$	$4-du$	$4-dl$	$DW$	Note
Equation (1)	1,54	1,71	2,54	2,29	1,902	No autocorrelation
Equation (2)	1,54	1,71	2,54	2,29	1,894	No autocorrelation

#### 4.3 Effects of Budgetary Participation on the Leader's the Performance

Relationship between budgetary participation and leadership performance is obtained by using simple linear regression analysis with budgetary participation as the independent variable and the response variable is the performance. The results are displayed in Table 5. We obtained the following regression equation where the expected response value of the response variable is written as:

$$\hat{y} = 6.333 + 0.240x \quad (4)$$

The equation informs us that the regression coefficient of the budget participation variable has positive value as big as 0.240 which indicates that the presence of budget participation's improvement increases the performance as big as the regression coefficient. The coefficient of determination,  $R^2$ , for the fitted model is 0.128 which means that partially, the budget participation variable has the ability to explain 12.8% of the performance's variance. The significance influence of the budget participation on the performance variable is tested statistically by the probability of 0.001. This value is less than usual alpha value of 0.10. Therefore the null hypothesis that budget participation does not have influence on leader's performance is statistically rejected.

Table 5. Simple regression analysis for the study

Dependent Variable	Independent Variable	Regression coefficient	$t$	$p$ value
Performance	Budgetary Participation	0.240	3.343	0.001

Constant = 6.333  
 $r = 0.358$   
 $R^2 = 0.128$   
 F value = 11.176  
 $p$  value = 0.001

## 5. Conclusion and Future Research

In the study we found that the research instrument was reliable to be used for the study. Results from the validity analysis have shown that the indicators used to have a strong explanatory factor so it is concluded that each item score is a valid question. We also found the higher the participation in the budget preparation will further improve the performance of managers (leaders). The results of this study are consistent with research conducted by previous researchers. In this research, we have not included any mediating variables to link up between dependent and independent variables. Further research should be addressed to add moderating variable in linking participation with leadership performance, for example: Organizational Commitment and Leadership Styles.

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