



The Budget-Related Antecedents of Job Performance

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Abstract

This study aims to investigate budget related antecedents of job performance of managers. For this purpose, the effect of budgetary participation, budget goal commitment and information sharing on job performance of managers were examined. The sample consists of 104 managers who are responsible from the budgets of their units in different private enterprises. Most of these enterprises are operating in automotive sector and located in Marmara Region of Turkey. Survey data was analyzed with confirmatory factor analyses and Structural Equation Modeling. Results indicate that budgetary participation has statistically significant and positive impact on job performance. It also positively affects budget goal commitment and information sharing. Budget goal commitment and information sharing have significant and positive impact on job performance. In addition, budget goal commitment positively affects information sharing of managers. Analyses also revealed that budget goal commitment and information sharing have partial mediation effect on the relationship between budgetary participation and job performance.

Key words: *Job Performance, Budgetary Participation, Budget Goal Commitment, Information Sharing.*

JEL classification: *M10, M12, M40, M41*

Introduction

Budgeting attracts the attention of organizations and researchers due to its function of coordinating the performance target of organizations and the target of employees (Dos Santos, Lavarda and Marcello, 2014). Although budgets are seen as an important tools of traditional results control, and criticizes by the

researchers from different perspectives; it preserves its importance for management control systems (Dos Santos, Lavarda and Marcello, 2014). As it was stated by Kenis (1979, 707), besides its financial guidance, budget also enhances control, coordination, communication, performance evaluation and motivations within the organizations. According to Collins (1978, 327) “the budgeting process can be used as a formal way of communicating organizational norms, values and expected behaviors with regard to interpersonal relationships”. Because of that, budget systems have been handled by many researchers from different angles. Researchers who investigate participation in budget formation processes have an important place in them (Onsi, 1973; Shields and Shields, 1998; Lau and Eggleton, 2003; Wong-On-Wing, Guo and Lui, 2010; Derfuss, 2015; e.t.c).

Budgetary participation–performance relationship has also attracted the attention of many management accounting researchers (Brownell, 1983; Chenhall and Brownell, 1988; Chong and Bateman, 2000; Chong and Chong, 2002; Derfuss, 2015; e.t.c). Results of previous studies (Brownell, 1983; Chenhall and Brownell, 1988; Chong and Bateman, 2000; Chong and Chong, 2002; Derfuss, 2015; e.t.c) offer controversial findings about budgetary participation–performance relationship. Although some researchers found statistically significant and positive relationship (Frucot and Shearon, 1991; Brownell, 1981; Brownell, 1982), several researchers asserted that there is no significant relationship between budgetary participation and performance (e.g. Wentzel, 2002). Also there are some researchers who propose negative relationship between these two variables (Cherrington and Cherrington, 1973). Along with direct relationship between participation and job performance, the indirect impact of budgetary participation on job performance via fairness (Wentzel, 2002), goal commitment (Murray, 1990; Wentzel, 2002), job satisfaction, job relevant information were also investigated in many researches. For example, several researchers stated that budgetary participation gives opportunity to members of organizations to obtain more resource. These extra resources allow them to increase the possibility of reaching planned budget target, and as a result, increase their performance (Brownell and Hirst, 1986).

As it is stated above, many researchers investigated the relationship among different factors. However, there is no research investigating the relationships among budgetary participation, budget goal commitment, information sharing and job performance in a holistic approach. In the current study, the relationships among budgetary participation, budget goal commitment, information sharing, and job performance were investigated. Because the managers are the most influential members of organizations on budget formation and usage processes, they were chosen as a sample of the current study. If the underlying effects of budgetary process on managers’ performance could be understood better, and their performance could be enhanced; organizational performance also could be enhanced. So, this research contributes the literature in order to understanding these process and enhancing managers’ performance and organizational performance. Another reason which makes this study important is lack of study investigating the relationship between budgetary participation and job performance of managers and impact of intervening factors in Turkey. It is important for the understanding of national enterprises and enhancing new strategies in order to increase their performance. With this point of view, it was purposed that budgetary participation directly enhances the job performance of managers who work at different levels of organizational hierarchies. It was also suggested that budget goal commitment and information sharing play a mediating role in this relationship. In other words, budgetary participation increases budget goal commitment and information sharing, and these two intervening variables increase job performance of managers.

The rest of the study is organized as follows; the next sections will present literature review related to budgetary participation, job performance, budget goal commit, budget related information and information sharing. In the third section, theoretical background of research model and hypotheses will be explained comprehensively. In addition to theoretical background, methodology of the research will also be presented in this section. Forth section will give information about the analyses conducted and their results. And lastly, result of the study will be outlined and discussed.

Literature Review

Budgetary participation is defined as a means by Dunk and Nouri (1998, 73). According to them, this means gives an opportunity to the subordinate managers for affecting plans and their instrument of application. It also gives an opportunity to participate in decision making process in issues affecting their own areas of responsibility (Dunk and Nouri 1998, 73; Kenis, 1979, 709).

In literature, some reasons were suggested in order to explain why employees participate in budget setting process in the organizations. Shields and Shields (1998) examined 47 researches mostly investigating the effects of participative budgeting on other variables. On the base of these researches, they classified the reasons of participative budgeting into six categories such as motivation, information sharing, satisfaction, mitigation of slack creation, coordination and job related tension. In addition to previous researches, they also conducted a survey in order to understand the reasons of participative budgeting. Collective results of these researches revealed that planning and control, information sharing and coordinating interdependence are the main reasons for participative budgeting. Wong-On-Wing, Guo and Lui (2010) also categorized the reasons of participate budgeting into two levels: an individual level and organizational level. These categories are as follows; satisfaction, accomplishment, belonging and identification in individual level, and goal setting and information sharing in organizational level.

Researchers have reached the consensus on that budgetary participation has an effect on the other organizational and individual variables. Because of that, the effect of budgetary participation on other variables constitutes another important part of research related to budgetary participation. Researchers suggest that budgetary participation has an effect on lots of variables such as job satisfaction (Brownell, 1983; Chenhall and Brownell, 1988; Frucot and Shearon, 1991; Chong and Bateman, 2000), organizational commitment (Nouri and Parker, 1998; Subramaniam and Mia, 2001; Chong and Chong, 2002), information asymmetry (Dunk, 1993; Lau and Eggleton, 2003), organizational fairness (Lau and Tan, 2003), information sharing, (Kren and Liao, 1988; Parker and Kyj, 2006), e.t.c.

Budgetary participation and job performance relationship is one of the most attractive issues in the management accounting literature. But while some of them suggested direct relationship; some of them suggested that intervening variables are effective on this relationship such as fairness (Wentzel, 2002), goal commitment (Murray, 1990; Wentzel, 2002), organizational commitment (Nouri and Parker, 1998), budget adequacy (Nouri and Parker, 1998), job satisfaction, job relevant information, role ambiguity, motivation etc. Murray (1990) posited that participative budgeting increases goal commitment of individuals, and increasing goal commitment enhances the performance. Wentzel (2002) also indicated that fairness perception and goal commitment mediate the relationship between budgetary participation and performance. Frucot and Shearon (1991) examined the effects of budgetary participation and locus of control on overall performance and overall satisfaction of Mexican managers. They found significant relationship between budgetary participation and overall performance of managers. They also found that budgetary participation positively affects the overall satisfaction of Mexican managers.

According to some researchers such as Nouri and Parker (1998), Wentzel (2002) and Parker and Kyj (2006) budgetary participation encourages organizational commitment. Participation of managers in budget formation process also motivates them to adopt budgetary goals of their organizations (Chong, Eggleton and Leong, 2006), and improve their budget goal commitment (Nouri & Parker, 1998; Chong & Chong, 2002; Wentzel, 2002). Previous research affirmed that if goals are set in a participatory manner, instead of assigning externally, possibility of individuals' goal acceptance will increase (Erez, Earley and Hulin, 1985; Chong and Johnson, 2007), and increased goal acceptance plays positive role on goal commitment (Chong and Johnson, 2007). Furthermore, there are lots of studies that show budgetary participation as a direct predictor of goal commitment (Hollenbeck and Klein, 1987; Chong and Chong, 2002; Chong and Johnson, 2007).

Wu (2005) accepts budgetary participation as a management strategy which is used in order to mitigate the negative impact of information asymmetry by allowing the information of employee to be incorporated in the budget plans. Because budgetary participation creates the opportunity to disclose information which

individual has, and also creates position to gain necessary information (Lau and Tan, 2003, 24; Parker and Kyj, 2006), it encourages and increases information sharing (Kren and Liao, 1988; Parker and Kyj, 2006) between the members of organization. Parallel with this opinion, many researchers found that budgetary participation plays an important role in information sharing (Shields and Shields, 1998; Lau and Tan, 2003). Superiors use the participative budgeting in order to gain subordinates' private information related to their responsibility areas (Shields and Shields, 1998; Parker and Kyj, 2006). In addition to superiors, subordinates also get information from other colleagues and their superiors about the general situation of organizations and budgets of their organizations.

Research and Methods

Research Hypotheses and Theoretical Model

Budgetary Participation - Budget Goal Commitment – Job Performance Relationship

Salancik (1977) and Hollenbeck and Klein (1987) suggested that there are some factors that affect goal commitment. These factors are publicness, volition and explicitness. According to Salancik (1977), if goals are known by the referent groups or important others (publicness), individuals less likely give up goals. It was also implied that if how much individuals feel themselves free to perform specific goals, the possibility to realize this goal will increase (volition). Individuals could more easily give up the goal that is determined by the external groups than the goal that is determined by them. Explicitness is another important factor introduced by Salancik (1977). It is more likely that individuals achieve the goal that is clear and certain. On the other hand, if the goal is implicit, it is more likely that individual will disregard, and not achieve the goal. The following explanations could be inferred from the statements of Salancik (1977) and Hollenbeck and Klein (1987): Because budgetary participation provides that goals are known by the important others, and increases the publicness of budgetary goals, managers will have more commitment to budgetary goals. Because budgetary participation gives to chance individuals to set their budgetary goals, it also increases volition of managers, and as a result, increases their goal commitment. In addition, budgetary participation provides better understanding and clearness of budgetary goals (Lau and Tan, 2003, 20). It also increases the goal acceptance of employees whose departments' budget goals are determined (Dunbar, 1971). Managers who participate in budget formation process feel more responsibility to achieve their budgetary goals (Buyukmirza, 2003).

Locke and Latham (2002, 707) also asserted that leaders could make better the goal commitments of the individuals though appropriate communication style and behavior type. One of the most important tools to communicate with members of organization and to share the vision of organization for the leaders is budget negotiations. In other words, if managers participate in budget negotiations, leaders could increase the budget goal commitment of managers. Locke and Latham (2002, 708) also indicated that participation makes goals important for the individuals and increases the commitment of individuals. In another research (Barrick, Mount and Strauss, 1993), it was reported that autonomously determined goals increase goal commitment. Because budgetary participation gives the opportunity to set their own budget goals and it increases the budget goal commitment of managers.

All this positive impacts of budgetary participation play an important role on budgetary goal commitment of managers. In other words, if the budgetary participation level of managers in organizations is high, managers' budget goal commitment will also be high (Chong and Chong, 2002). This assumption was hypothesized as follows;

Hypothesis 1: *Managers' participation in budget formation process positively affects their budget goal commitment.*

In literature, it was proven that setting specific goals have positive impacts on performance. However, there are some propositions which assume that this relationship depends on the level of goal difficulty. For example, some researchers (Erez and Zidon, 1984; Hollenbeck and Klein, 1987; Klein, Wesson, Hollenbeck and Alge, 1999; Locke, Shaw, Saari and Latham, 1981) found evidence about that goal

commitment positively affects job performance if only challenging goal is set. Also Hannan (1975) found that participation increases the adaptation of challenging goals.

Barrick, Mount and Strauss (1993) found that all the goals are perceived as difficult by the sample of their study (sales representatives and supervisors), and they reported low correlation between goal difficulty and performance. However, they found positive relationship between goal commitment of sales representatives and their job performance rated by supervisors

As a result, it could be indicated that if individuals commit their goals, their performance will be higher (Locke and Latham, 2002). This is hypothesized as follows:

Hypothesis 2: Managers' budget goal commitment positively affects their job performance.

Nouri and Parker (1998) examined the intervening effect of organizational commitment on the relationship between participation and performance. They found positive relationship between participation and performance, and proved the intervening effect of organizational commitment on this relationship. In their study, they defined strong organizational commitment as "...the acceptance of organizational goals and a willingness to exert effort on behalf of the organization". It means that strong organizational commitment comprises budget goal commitment, and budgetary participation increases the acceptance of goals and commitment to them. Wentzel (2002) also suggested that increasing budgetary participation enhances budget goal commitment, and budget goal commitment increases the performance.

Accordance with the relationship expressed above, it could be hypothesized as follows;

Hypothesis 3: Managers' budget goal commitment mediates the relationship between budgetary participation and their job performance.

Budgetary Participation – Information Sharing – Job Performance Relationship

Information is one of the key strategic resources in the organizations (Ipe, 2003). However the usefulness of this strategic resource is depends on the correct usage and sharing in the organizations. It could contribute to the success of organizations, if it is correctly understood and created and effectively shared and used in the organizations (Ipe, 2003). Information sharing is thought, job relevant information and their expertise sharing action of employees with each other (Bartol and Srivastava, 2002, 65). It is important because it is the helpful way of the communication within the organizations by providing the flow of information possessed by employee related to their organizations or expertise among the employees and managers. Thanks to information sharing, information can be transformed into intellectual capital which provides economic advantage to the organizations (Hendriks, 1999).

Effective information sharing strengthens the competitive advantage of the organizations and increases organizational success (Ipe, 2003). In research conducted by Chong and Johnson (2007), it was suggested that budgetary participation has positive impact on the sharing and dissemination of information related to their jobs among the subordinates. They also indicated that information sharing and usage of these information increase job performance (Chong and Johnson, 2007, 67). According to the results of another research (Parker and Kyj, 2006), budgetary participation has positive and significant impact on vertical information sharing between subordinates and superiors, and vertical information sharing also positively affects the job performance of managers. As one of the important output of budgetary participation, effective information sharing is an important factor affecting job performance of managers.

In brief, budgetary participation increases information sharing between the members of organizations. Effective information sharing also enhances the job performance of managers. These relationships were hypothesized as follows;

Hypothesis 4: Managers' participation in budget formation process positively affects information sharing between the members of organization during the budget formation process.

Hypothesis 5: Information sharing between the members of organization during the budget formation process positively affects managers' job performance.

Hypothesis 6: Information sharing between the members of organization during the budget formation process mediates the relationship between budgetary participation and their job performance.

Relationship between Budget Goal Commitment and Information Sharing

Based on the Goal Setting Theory, Chong and Johnson (2007) suggested that budgetary participation has positive impact on individual's budget goal commitment. According to them, individuals who have high commitment to the budgetary goals will make an extra effort for gaining and using necessary information related to their jobs (Chong and Johnson, 2007, 69) in order to attain their budgetary goals. As a result, budget goal commitment of managers increases their information sharing. This explanation is hypothesized as follows;

Hypothesis 7: Managers' budget goal commitment positively affects their information sharing.

Relationship between Budgetary Participation and Job Performance

Brownell and McInnes (1986) investigated the relationships among budgetary participation, motivation and performance based on the Expectancy Theory. They suggested that motivation has an intervening effect on the relationship between budgetary participation and performance. Contrary to their expectation, motivation has very little impact on this relationship. In contrast, they found positive relationship between budgetary participation and performance. Dunbar (1971) stated that budgetary participation increases performance of employee who participate budget formation process. Milani (1975) also found weak support for the relationship between participation and performance.

Locke and Latham (2002) reviewed the studies investigating the goal setting theory between 1966 -2002 in their meta-analysis. As a result of research, they outlined that if the goals are determined in a participatory manner, performance will be greater, and if goals are determined by the externally, performance will lower. Barrick, Mount and Strauss (1993) found that autonomous goal setting increases job performance. Because budgetary participation allows the managers to set their own departments' budget goals autonomously, budgetary participation enhances the job performance of managers. These assumptions are hypothesized as follows;

Hypothesis 8: Managers' participation in budget formation process positively affects their job performance.

According to the recommended hypotheses, research model was developed and presented in Figure 1.

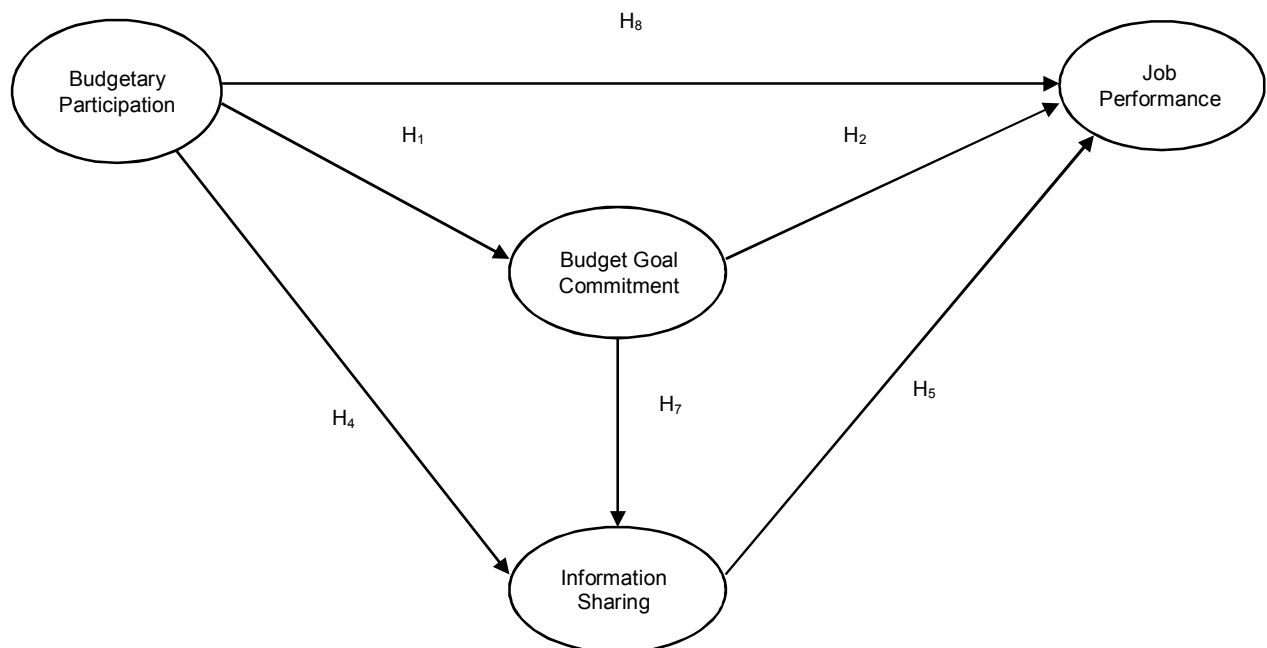


Figure 1: Research Model

Methods

Data Collection

The sample of the current study is randomly selected managers who are responsible from the budgets of their units in different private enterprises. Most of these enterprises are operating in automotive sector and located in Marmara Region of Turkey. Survey respondents are the managers who participate in decision making process in their own enterprises. The data was gathered via questionnaire that consists of 18 Likert-type scales. Totally, 129 questionnaires were distributed to the managers via e-mail and 111 usable questionnaires were returned. The response rate of managers is 0.86. Some questionnaires were excluded from the study because of misleading answers of managers. As a result, the final data consists of 104 questionnaires with 0.81 response rate. This response rate shows that a good response rate was achieved for the data in this study (Babbie 1989, 1990). In order to analyze data and to test research hypotheses, confirmatory factor analysis and Structural Equation Modeling were used via WarpPLS 3.0 Software.

Scale Development

In this study, the relationship among budgetary participation, budget goal commitment, information sharing and job performance are investigated. Scales of this study were adopted from the related literature. These previous researches revealed that the reliability and validity of scales used in the current study are strong. Questionnaire formation process is performed accordance with Brislin's (1970, 1986) approach in order to test the adequacy of scales' Turkish version. Firstly, scales that were originally developed in English translated to Turkish. In second stage, Turkish version of questionnaire was translated back to English. Results proved the adequacy of Turkish scales. Questionnaire was evaluated with five managers who are responsible from the budgets of their units in different private enterprises. Pre-test also was also performed though 30 questionnaires which were gathered from managers. Feedback obtained from managers and pre-test showed that some items are not appropriate for the current study. So, some items were excluded and some items were adjusted. All factors were measured by five-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Budgetary participation was measured with three scales which were adapted from Milani (1975). Milani's budgetary participation scale has been used extensively in management accounting research. Information sharing was measured with three scales which were adapted from (Parker and Kyj, 2006) and Chalos and Poon (2000). Budgetary goal commitment variable was also measured with three scales that were adapted from Maiga (2005) Latham and Steele (1983) and Erez and Arad (1986). Lastly, job performance was measured with eight scales which were adapted from Nouri and Parker (1998) and Parker and Kyj, (2006). All scales of the current study were used many times in previous studies, and their reliabilities were proven by these past researches.

Analyses and Results

In order to achieve the research objective of investigating the relationship between budgetary participation, budget goal commitment and information sharing with the job performance of managers and intervening effects, the data was analyzed using structural equation modeling (SEM) method. SEM method analyzes different relationships among variables at the same time. In order to perform SEM, nonlinear partial least squares (PLS) regression technique was used with WarpPLS 3.0 Software (Kock, 2012). The superiority of WarpPLS Software is that it also takes into account of the non-linear relations between the latent variables (Kock, 2011).

Model Fit Indices

In order to assess the fitness of model to data, fit indices were calculated in Warp PLS 3.0 Software. According to the findings, p values of APC (Average Path Coefficient: 0.330) and ARS (Average R-Squared: 0.348) are lower than 0.001 (Kock, 2012). AVIF (Average Variance Inflation Factor: 1.144) is lower than 5 (Kock, 2012). According to these results, all the fit indices meet the necessary criteria for the research model. It means that our model fits the data and has satisfactory predictive and explanatory quality (Kock, 2012). Jackknifing was used as a sampling technique because it provides better results than

the other techniques of WarpPLS in the existence of outliers, especially with small sample size (Kock, 2011). In Table 1, model fit indices and p values are presented.

Table 1: Model Fit Indices and P values

APC (Average path coefficient)	0.330	p<0.001
ARS (Average R-Squared)	0.348	p<0.001
AVIF (Average Variance Inflation factor)	1.144	Good if < 5
Algorithm used in the analysis	Warp3 PLS regression	
Resampling method used in the analysis	Jackknifing	
Number of cases (rows) in model data	188	

Measurement of Reliability and Validity

In this study, confirmatory factor analyses were conducted to test the fitness of the data to research model. The results of the analysis show that all combining factor loadings are greater than 0.5, and their p values of each combining factor loadings are lower than 0.001. According to these results, it could be stated that research model has acceptable convergent validity (Hair, Black, Babin and Anderson, 2009). According to Fredriksson (2010, 73) and Jewell (2011), to mention discriminant validity, the loadings of each item on its own latent variable should be greater than its loadings on other variables. In the current study, all the loadings are convenient to this criterion and it proves the discriminant validity. Loadings and cross-loadings are presented in Table 2.

Table 2: Combined loadings and cross-loadings

	Budgetary Participation	Information Sharing	Job Performance	Budget Goal Commitment	SE	P value
BP1	0.858	-0.210	0.233	-0.086	0.081	<0.001
BP2	0.878	-0.037	-0.205	0.107	0.132	<0.001
BP3	0.821	0.260	-0.024	-0.025	0.085	<0.001
IS1	-0.117	0.796	-0.069	-0.035	0.049	<0.001
IS2	0.061	0.884	0.081	0.050	0.053	<0.001
IS3	0.047	0.837	-0.020	-0.019	0.085	<0.001
JP1	0.041	0.058	0.718	0.559	0.070	<0.001
JP2	-0.121	0.208	0.768	0.086	0.055	<0.001
JP3	-0.128	0.035	0.741	0.129	0.067	<0.001
JP4	0.063	-0.126	0.790	-0.138	0.090	<0.001
JP5	0.010	-0.398	0.728	-0.240	0.127	<0.001
JP6	-0.066	-0.153	0.647	0.089	0.144	<0.001
JP7	0.084	-0.122	0.574	-0.447	0.067	<0.001
JP8	0.141	0.490	0.676	-0.118	0.073	<0.001
BGC1	-0.169	0.092	0.082	0.799	0.065	<0.001
BGC2	0.028	0.066	-0.112	0.896	0.065	<0.001
BGC3	0.128	-0.154	0.041	0.860	0.080	<0.001

Firstly, reliability analysis was conducted in order to test whether the scale items are understood by the respondents in the same manner (Kock, 2012) and whether the scale of same latent variable are adequately correlated among them (Rosenthal & Rosnow, 1991; Ketkar, Kock, Parente and Verville, 2012). In order to measure the reliability of scales, composite reliability (CR) coefficients and Cronbach's alpha coefficients were computed (Bagozzi and Yi, 1988). Bagozzi and Yi (1988) indicates that CR coefficients should be higher than 0.6. In addition to Bagozzi and Yi (1988), Nunally (1978) increases this limit to 0.7. All the CR coefficients in our study are greater than 0.7 as it is suggested by Bagozzi and Yi (1988) and Nunally (1978). As second indicator of reliability, Cronbach Alpha coefficients were also calculated. According to the results, all Cronbach Alpha coefficients are higher than 0.6 as it is suggested by Anderson et al. (1998). These results confirm the reliability of research scales.

Table 3: Composite Reliability, Cronbach's Alpha and AVEs

	Composite Reliability Coefficients	Cronbach's Alpha Coefficients	Average Variances Extracted
Budgetary Participation	0.889	0.812	0.727
Information Sharing	0.877	0.790	0.705
Job Performance	0.889	0.856	0.502
Budget goal commitment	0.888	0.811	0.727

In order to measure convergent and discriminant validity, average variances extracted (AVE) for each latent variable were calculated (Kock, 2012). Fornell and Larcker (1981) suggested that AVE should be greater than 0.5. Parallel with the criterion of Fornell and Larcker (1981), all AVEs are greater than 0.5 in the current research. In other words, the scales have convergent validity. In order to assess discriminant validity, AVEs should be considered together with latent variable correlations. It means that the square root of AVE for each latent variable should be greater than the other correlation related to same latent variable on the same column (Fornell & Larcker, 1981; Kock, 2012). According to results, all square roots of AVE shown on diagonal are higher than other correlations related to same latent variables. It means that scales used in this research have discriminant validity.

Table 4: Latent Variable Correlations

	BP	IS	JP	BGC
Budgetary Participation	0.853			
Information Sharing	0.229	0.840		
Job Performance	0.383	0.650	0.708	
Budget goal commitment	0.250	0.397	0.747	0.852

Note: Square roots of average variances extracted (AVE's) shown on diagonal.

Results of SEM Analysis

SEM analysis was performed to investigate the relationship among budgetary participation, budget goal commitment, information sharing, and job performance. As a result of SEM analysis, the estimated relationships are presented in Figure 2, and path coefficient and p values are shown in Table 5.

According to the results of analysis, there are statistically significant and positive relationships between budgetary participation and job performance ($\beta=0.17$, $P<0.01$); between budgetary participation and budget goal commitment ($\beta=0.26$, $P<0.01$); budgetary participation and information sharing ($\beta=0.22$, $P<0.01$). Results proved the existence of significant and positive relationships between goal commitment and information sharing ($\beta=0.40$, $P<0.01$); goal commitment and job performance ($\beta=0.54$, $P<0.01$). There are also significant and positive relationships between information sharing and job performance ($\beta=0.38$, $P<0.01$). According to R square coefficients, budgetary participation explains 0.07% of total variance of budget goal commitment. Budgetary participation and budget goal commitment explain 0.24 of total variance of information sharing. Budgetary participation, budget goal commitment and information sharing explain 0.73 of total variance of job performance. R square value reveals that budgetary participation, budget goal commitment and information sharing play an important role to predict job performance of managers.

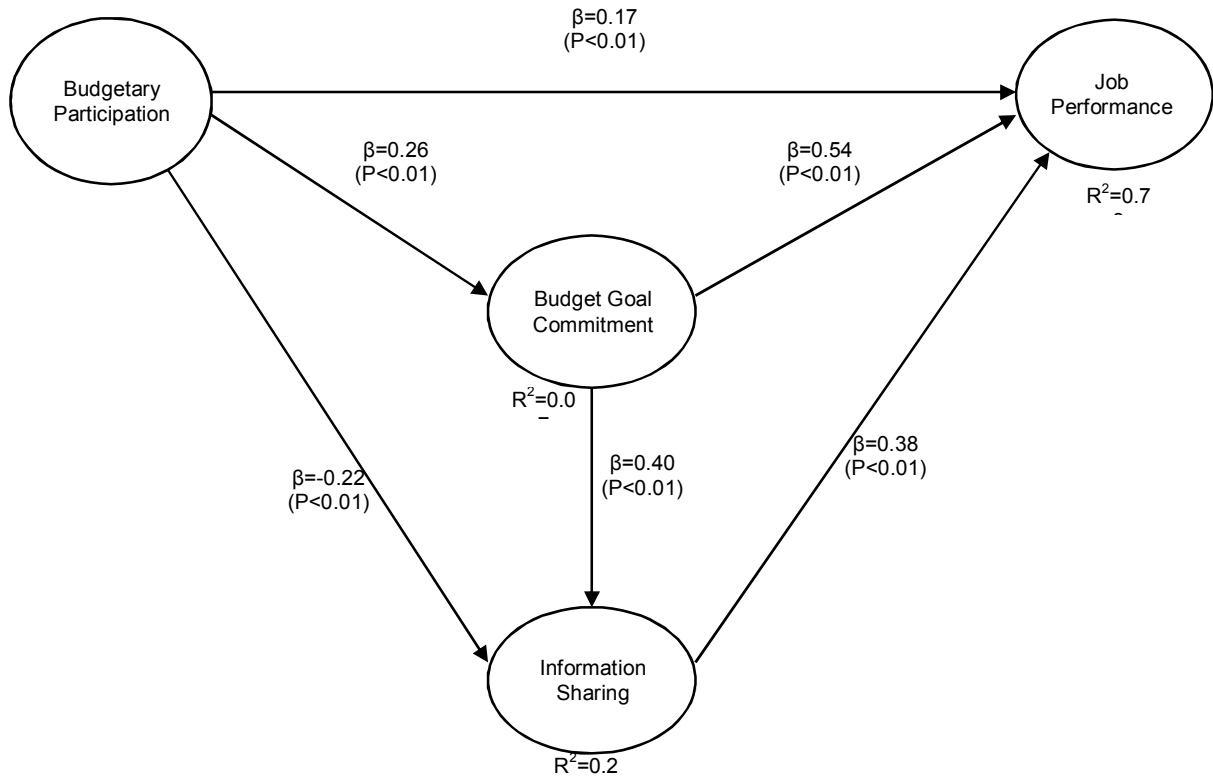


Figure 2: Results of Structural Equation Modeling

Table 5: Path coefficients and P Values

	Path	Path coefficients	P values	Validation
Hypothesis 1	BP → BGC	0.263	<0.001	Valid
Hypothesis 2	BGC → JP	0.544	<0.001	Valid
Hypothesis 4	BP → IS	0.221	<0.001	Valid
Hypothesis 5	IS → JP	0.381	<0.001	Valid
Hypothesis 7	BGC → IS	0.401	<0.001	Valid
Hypothesis 8	BP → JP	0.168	<0.001	Valid

In order to test Hypotheses 3 and 6, the mediation effects of budget goal commitment and information sharing on the relationship between budgetary participation and job performance were analyzed by using Baron and Kenny's approach. As it is stated by Baron and Kenny (1986, 1176) below, there must be certain conditions to mention about the existence of mediation;

"... (a) variations in levels of the independent variable significantly account for variations in the presumed mediator (i.e., Path a), (b) variations in the mediator significantly account for variations in the dependent variable (i.e., Path b), and (c) when Paths a and b are controlled, a previously significant relation between the independent and dependent variables is no longer significant, with the strongest demonstration of mediation occurring when Path c is zero. In regard to the last condition we may envisage a continuum. When Path c is reduced to zero, we have strong evidence for a single, dominant mediator. If the residual Path c is not zero, this indicates the operation of multiple mediating factors."

Parallel with these explanations, Kock (2013, 4) indicates that mediation analysis can be conducted with two models in WarpPLS Software. Accordance with these explanations; firstly, budgetary participation and job performance link was tested. Secondly, budgetary participation, budget goal commitment and job performance relationships (BP→JP; BP→BGC; BGC→JP) were examined.

Results of these analyses are presented in Table 5. According to the results of the analysis of first model, budgetary participation significantly and positively affects job performance of managers ($\beta=0.42$, $P<0.01$). The results of the analysis of second model that investigates the relationships among budgetary

participation, budget goal commitment and budgetary participation (BP→JP; BP→BGC; BGC→JP) revealed that budgetary participation ($\beta=0.24$, $P<0.01$) and budget goal commitment ($\beta=0.68$, $P<0.01$) have significant and positive impact on job performance of managers. However, the effect of budgetary participation in multiple effect ($\beta=0.24$, $P<0.01$) is lower than its impact in separate analysis ($\beta=0.42$, $P<0.01$). Budgetary participation also significantly affects budget goal commitment of managers ($\beta=0.26$, $P<0.01$). It means that budget goal commitment has partial mediation effect on the relationship between budgetary participation and job performance of managers. This findings support Hypothesis 3.

Table 5: Path coefficients and P Values for Mediation Analysis for Budget Goal Commitment

	Path	Path coefficients	R ²	P values	Validation of Hypothesis 3
Step 1	BP → JP	0.42	0.18	<0.01	Valid
Step 2	BP → BGC	0.26	0.07	<0.01	
	BP → JP	0.24	0.61	<0.01	
	BGC → JP	0.68		<0.01	

In order to analyze whether information sharing has mediation effect on the relationship between budgetary participation and job performance, previous analyzes were repeated in order to analyze relationship among information sharing, budgetary participation and job performance. According to results, budgetary participation and job performance relationship ($\beta=0.42$, $P<0.01$) is statistically significant and positive. The results of the analysis that investigates the relationships between budgetary participation, information sharing and job performance (BP→JP; BP→IS; IS→JP) revealed that budgetary participation and information sharing relationship is also significant and positive ($\beta=0.30$, $P<0.01$). In addition to this, budgetary participation ($\beta=0.25$, $P<0.01$) and information sharing ($\beta=0.58$, $P<0.01$) have statistically significant and positive effect on job performance. However, similar with previous results, the effect of budgetary participation in multiple impact ($\beta=0.25$, $P<0.01$) is lower than its impact in separate analysis ($\beta=0.42$, $P<0.01$). This reveals that information sharing has also partial mediation effect on the relationship between budgetary participation and job performance. These results support Hypothesis 6. The effects of both mediator variables on this relationship are close to each other.

Table 6: Path coefficients and P Values for Mediation Analysis for Information Sharing

	Path	Path coefficients	R ²	P values	Validation of Hypothesis 3
Step 1	BP → JP	0.42	0.18	<0.01	Valid
Step 2	BP → IS	0.30	0.09	<0.01	
	BP → JP	0.25	0.49	<0.01	
	IS → JP	0.58		<0.01	

Conclusion

Job performance is one of the key elements which determine the success of organizations. Because of that, the current study aimed to investigate the effect of budgetary participation on job performance of managers working at different levels of organizations. In addition, it is also investigated the effects of budget goal commitment and information sharing on the budgetary participation-job performance relationship. Structural Equation Model was used to investigate the relationships in question by means of Warp PLS 3.0 Software.

The results of the study revealed that budgetary participation has an effect on all variables (budget goal commitment and job performance of managers and information sharing among them). Firstly, if managers participate in budget formation process, their job performance will be higher. This result of current study supports the finding of past researches such as Milani (1975), Brownell and McInnes (1986), Barrick, Mount and Strauss (1993), and Locke and Latham (2002). However, some researchers (Murray, 1990;

Frucot and Shearon, 1991; Wentzel, 2002) reported that there is only indirect relationship between budgetary participation and job performance.

High budgetary participation of managers will also provide the more committed managers to the budgetary goals of organization (Nouri and Parker, 1998; Wentzel, 2002). High budgetary participation also reveals the special and concealed information related to managers' responsibility areas. So, budgetary participation increases information sharing among managers. This result was also supported by previous research (Kren and Liao, 1988; Shields and Shields, 1998; Parker and Kyj, 2006; Chong and Johnson, 2007).

The relationship between budget goal commitment of managers and their information sharing was also investigated. According to results, budget goal commitment has positive impact on information sharing among managers. In other words, if managers have more commitment to budgetary goals of organizations, they will tend to disseminate necessary information in order to attain budgetary goals, and they will share their concealed information related to their responsibility areas. This relationship also supported by Chong and Johnson (2007).

Budgetary participation also has indirect impact on job performance of managers via budget goal commitment and information sharing. In other words, increase in budgetary participation also increases budget goal commitment of managers and information sharing among them. If managers have higher budget goal commitment, they will make more effort in order to attain budgetary goals which were determined in a participatory manner. This relationship was also supported by Nouri and Parker (1998) and Wentzel (2002). Budgetary participation also increases the dissemination and effective use of information. Increasing information sharing and effective use of information are also another factor which increases the job performance of managers. These findings were also supported by Chong and Johnson (2007) and Parker and Kyj (2006).

This study contributes to the related literature and practice by revealing budget related variables which increase job performance. If top managers know factors affecting job performance, they could enhance their organizational politics and organizational culture accordance with these factors. So, they could increase job performance of their managers, and in final stage, increase organizational performance.

The current study has several limitations as all studies have. This study investigates the effect of budgetary participation, budget goal commitment and information sharing on job performance of managers. However, there could be more variables affecting job performance. Because of time constraint and distance among the enterprises, the sample of study is limited and it comprises several variables. Another limitation is the unwillingness of managers to participate in these kinds of research and to give information about their units. We believe that future research will close the gap caused by the limitation of this study.

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