



Participative Budgeting, Organizational Commitment and Managerial Performance: Evidence from Nigeria

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ABSTRACT

The influence of participative budgeting, organizational commitment, and interaction of participative budgeting and organizational commitment on managerial performance in budgeting activities is an area in management accounting that is continuously receiving research attention. Earlier studies were conducted in developed countries and focused on large firms, excluding small and medium-size firms and reported conflicting findings. This serves as the motivation for the study. The study population consisted of all Sachet and Table Water producing firms registered with the Delta State Ministry of Commerce and Trade, Nigeria. A sample of 150 firms was selected based on purposive sampling technique. Data were obtained through the administration of questionnaires by research assistants of the sampled firms. Multiple regression analysis was deployed to estimate the influence of participative budgeting, organizational commitment and the interaction of participative budgeting, and organizational commitment on managerial performance of budgeting activities. Findings show that participating budgeting, organizational commitment and the interaction of participative budgeting and organizational commitment have a positive and significant influence on managerial performance. The findings have policy implications for organizational control design, the budgeting system, strategies for involving managers in budgeting, instilling their organizational commitment, and improving their performance.

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1. Introduction.

Participative budgeting is becoming a more popular budgeting system, unlike the traditional budgeting systems. It appears to be superior and encourages subordinate collective efforts in decision-making (Weil & Mahar, 2005). While it supports a bottom-up approach that brings lower-level staff into the budgeting system, it vests top management with the responsibility to initiate the budget process and provide the general guidelines for budget preparation. In some ways, it creates a forum for interaction which is not only significant but leads to information exchange between subordinates and middle (or lower-level) managers, providing the much needed enrichment to budget inputs. This form of budgeting discourages the exclusivity of discussion and final resource allocation authority of top management, encouraging robust interactions with subordinates and lower-level managers, leading to fusion of budget inputs and information. It tends to encourage a strong collaborative effort among subordinates, middle managers, lower-level managers, and top management in the entire budget preparation and implementation process. Thus, it shows the level of involvement and influence individuals in the process of preparing a budget, which can result in alignment of goals (Nurrasyid, 2015, cited in Agustina, 2021). Its operation highlights participation of many parties in a firm or scope of work, which facilitates joint exchange of information which, in turn, determines and encourages the compilation of a budget to achieve organizational goals (Putra, 2019, cited in Agustina, 2021). The concept of participative budgeting has not only created a formidable harmonious working relationship, but has significantly enabled subordinates, middle and low-level managers to truthfully provide useful information for top management. Such information is usually of great value in decision-making, particularly in the areas of capital budgeting, production, and marketing (Douthit & Stevens, 2015).

In contemporary times, the participative budgeting system now constitutes an important element of a firm's organizational design through which valuable communication is possible (Heinle et al., 2014). It is designed to seek employee motivation and commitment and fosters creativity among employees, including the sense of responsibility, as well as job performance for both employees and managers (Weil & Maher, 2005). Estimates that emanate from participative budgeting tend to be more accurate and reliable, leading to better acceptance among members of an organization (Hoque, 2005). Participative budgeting, from psychological and cognitive perspectives, points to identification and ego involvement in setting budget goals. By doing so, it relates to performance, leading to enhanced motivation and commitment (Murray, 1990, cited in Melek, 2006). With this, improvement in information flow between superiors and subordinates is assured, which can lead to much higher quality decisions. Thus, budget participation leads to higher motivation, higher commitment, higher quality decisions and hence higher performance (Melek, 2006). Furthermore, it tends to make employees to be positively affected by developing a deep sense of organizational commitment (Lambert, 2004). Drawing from this, there is a likelihood of a partisan affective attachment to goals and values, as well as to the organization (Buchanan, 1974).

Managerial performance in the context of budgeting activities is all about the degree to which the budget manager is successful in discharging those activities (Parker & KY, 2006). Mahoney et al., (1965) explained it as a manager's ability to carry out those managerial activities, which involve: planning, coordination, investigation, evaluation, staff regulation, supervision, representation and negotiation. These activities enable the realization of goals, objectives, vision and mission of an organization, which measure the success rate of a manager in carrying out his duties by comparing it with previous targets (Larrisa et al., 2022).

Participative budgeting is now being considered as an important participation channel in an organization and can be explored to reveal positive, negative or otherwise effects on managerial performance. Over the years, several studies have shown that the participative budgeting system has an effect on managerial performance via organizational commitment as a moderating variable. Findings from some studies show that there is a positive link between participative budgeting and managerial performance, while others show a negative link (Bryan & Locke, 1967). Some other studies have also reported no association between participative budgeting and performance (Kenis, 1979). However, the studies that explored the influence of participative budgeting on managerial performance, with the mediating role of organizational commitment are mostly conducted in developed countries. They include those by Suwanto et al., (2022); Yunika et al., (2022); Agustina (2021); Lunardi et al. (2020); Ramses and Yvonne (2019); Syakieb et al. (2018); Dani et al. (2017);

Macinati et al. (2016); Derfuss (2016); Venkatesh and Blaskovich (2012); Sandalgaard et al. (2011). These studies focused mainly on large firms at the expense of small and medium-scale firms.

In Nigeria, studies of this nature are scarce and constitute a research gap that needs to be explored. Thus, the current study is poised to investigate the influence of participative budgeting on managerial performance via organizational commitment as a mediating variable. In addressing the main objective of the study, three specific objectives are stated: (i) Determine whether participative budgeting has influence on managerial performance; (ii) Ascertain whether organizational commitment has influence on managerial performance; (iii) Find out whether the interaction of participative budgeting and organizational commitment influences managerial performance. The study differs from others because it is conducted in Nigeria with a different organizational culture and operating environment, and it focuses specifically on small and medium-sized Sachet and Table Water producing firms in Nigeria.

The study contributes in a number of ways. First, it employed theoretical perspectives from the field of psychology, which provide a unique opportunity to develop and provide valid explanations about the concept of participative budgeting practice, its relevance in the field of accounting, and its adoption in an organization. Secondly, it seeks to improve the understanding of participative budgeting, organizational commitment, and managerial performance. Thirdly, it shows how participative budgeting and organizational commitment individually affects the phenomenon of managerial performance. Fourthly, it provides insights into how the interaction between participative budgeting and organizational commitment explains improvement in managerial performance of budgeting activities. Finally, it contributes to the literature on participative budgeting and behavioural perspective on accounting and management practices with interest in identifying the design of a budgetary control system capable of involving managers, which can lead to their improved performance in budgeting activities.

The remainder of the paper is structured as follows: The second section deals with the theoretical framework which is about the theories that underpin the study. Section three dwells on literature review and hypothesis development; it examines the influence of participative budgeting, organizational commitment, interaction of participative and organizational commitment on managerial performance from which the study hypotheses were constructed. Section four presents the research methodology, including the population and sample definition, data collection method, measurement of the constructs and presentation of data. Section five presents discussion of the results obtained while the final section presents the conclusion of the study.

2. Theoretical Framework

Budgeting research has its underpinning in psychology, a discipline that focuses mainly on human behaviour. Theories in psychology seek to provide the basis for not only understanding but also how the effect of budget varies from individual to individual (Covaleski et al., 2007). These theories provide the basis upon which budgeting can influence human behaviour, especially given the relationship between superiors and subordinates in an organization (Birnberg et al., 2007; Frezatti et al., 2010). Given this perspective, a budget is seen as a control instrument employed by organizations to communicate subordinates' objectives, goals, and motivation (Derfuss, 2016). As a control instrument, it provides a basis for understanding the effects of budget on the mental state, as well as individuals' behaviour at the work place, their attitudes, and managerial performance (Dani et al., 2017). Thus, theories in psychology can be adaptable in understanding human behaviour, particularly as it relates to budgeting. The contextualization of participative budgeting and managerial performance in psychological and behavioural approach with respect to accounting is appropriate (Lunardi et al., 2020; Zonatto et al., 2019). It attests to the fact that several studies on budgeting are anchored on theoretical foundations drawn from psychology, which have assisted in addressing various factors that influence the relationship between participative budgeting and managerial performance. Amongst such studies are: Dani et al., (2017); Derfuss (2016), and Lunardi et al. (2020). Some of the factors are capable of providing explanation for subordinate performance in their various job activities, especially those related to budgeting (Macinati et al., 2016).

From the foregoing, we propose the Social Cognitive Theory (SCT) approach in this study because it has been used in several studies, such as those by Ni et al., (2009), Saithong-In and Ussahawanitchakit (2016), Yuliansyah and Khan (2017), Venkatesh and Blaskovich (2012),

Nascimento (2017), and Schlup (2018). The theory assists in identifying variables for the purpose of understanding and providing explanations of the effects of budgetary participation on managerial performance in budgeting activities.

3. Literature Review and Development of Hypotheses

3.1. Participative Budgeting and Performance

From an empirical perspective, Chong & Chong (2002) found that budgeting information affects subordinates job performance through information sharing mechanism, a sense of control, and trust. These factors are seen in the context of higher commitment (Subramanian & Mia, 2001). Organizational commitment does not only improve an employee morale, job satisfaction and performance, but employees also usually tend to be less resistant to change and more amenable to accepting and showing commitment to budgeting decisions (Shields & Shields, 1998). Noor and Othman (2012) study in Malaysia found that budgetary participation has a significant positive relationship with managerial performance. Other studies that reported related findings are: Suwanto et al. (2022), Ramses and Yvonne (2019), Yunika et al., (2020), Syakieb et al. (2018), Hariyanto (2018), Yahha et al., (2008), Yuen (2007), leach-Lopez (2007), Chong and Johnson (2007), Chong and Chong (2002) and Nouri and Parker (1998). However, Musoke and Nyonyintono (2017) found that participatory budgeting is not related to profitability performance, but it is a significant predictor of customer satisfaction amongst savings and credit cooperatives in Wakiso district of Uganda. In the study of Andry (2014), participative budgeting was found to have significant negative influence on managerial performance.

Arising from the above it is hypothesized that:

H1: Participative budgeting has a significant influence on managerial performance.

3.2. Organizational Commitment and Managerial Performance

The concurrence of the conceptual framework and empirical research outcomes on organizational commitment and managerial (subordinate) performance has been found in the existing literature. In the work of Yousef (2000), organizational commitment was used as a mediating variable, and the results show that it has significant influence on employees' attitudes, measured in terms of job satisfaction, performance, turnover intention, and absenteeism. Suliman (2002) found that committed employees are rated more positively than less committed employees. Commitment has the tendency to create behavioural consequences that have tangible and intangible impacts on an organization, which according to Meyer and Herscovitch (2001), include the following, but not limited to lower turnover, reduced absenteeism, performance improvement, and increased organizational behaviour. Yousef (2000) study on the mediating effects of organizational commitment on the relationship between leadership behaviour, job satisfaction, and job performance seems very instructive. The author found that organizational commitment with job satisfaction and job performance was significantly positive. The study reached the conclusion that employees who are committed to an organization appear to be more satisfied with their jobs; hence, their job performance is better. Accordingly, employees who are affectively committed tend to overcome organizational problems, which improves their satisfaction and performance (Scott-Ladd et al., 2006). The authors recognized that one important factor to consider is the employees' and employers' attitudinal response. This helps to improve managerial performance and it remains an important aspect that fosters the dominance of affective commitment. Ramses and Yvonne (2019), Andry (2014), Noor and Othman (2012), and Kristin (2002) found a significant positive relationship between organizational commitment and managerial performance. On the contrary, Vincent et al., (2002), and Yunika et al. (2020) reported that organizational commitment does not positively affect performance. Based on the above, the study proposed the following hypothesis:

H2: Organizational commitment has a significant influence on managerial performance.

3.3. Influence of Participative Budgeting on Managerial Performance via Organizational Commitment

The studies of Syakieb et al (2018); Hashim et al. (2014); Jermias and Yigit (2013); Melek (2006); Nouri & Parker (1998), and Yahya et al. (2008) have found a positive effect of organizational

commitment on the relationship between participative budgeting and managerial performance. In the study of Hariyanto (2018), the author found that participative budgeting through goal commitment increased managerial performance. In a different study conducted by Yunika et al. (2020) the findings revealed that organizational commitment has no direct influence on managerial performance, but has indirect influence through participative budgeting. The authors also reported that organization commitment positively influence the relationship between participative budgeting and managerial performance. On the contrary, Parker and Kyj (2006) found a significant, indirect effect of organizational commitment on job performance through information sharing medium. Drawing from the following, the study proposed that:

H3: Interaction of participative budgeting and organizational commitment has a significant influence on managerial performance.

3.4. Research Framework

From the above literature reviewed and hypotheses drawn, the research model is shown as:

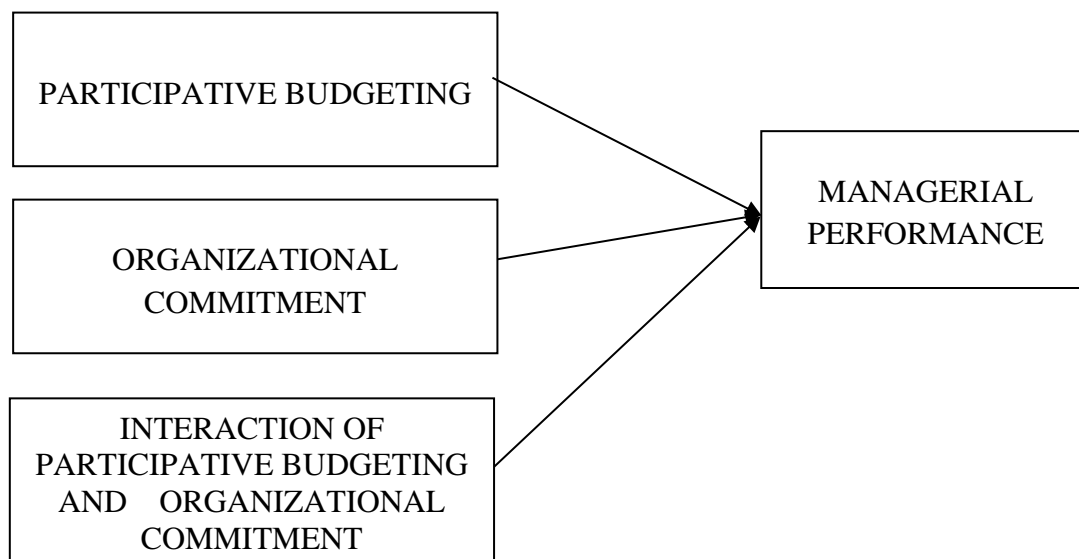


Fig. 1. Research Framework

4. Research Methodology

The study applied a survey research design. It adopted the quantitative research technique because, according to Cooper and Schinder (2008), is used to measure behaviour, knowledge, opinions or attitude. The population consists of Sachet and Table Water producing firms in Delta State, Nigeria, and the respondents were mainly managers of the selected firms. Data were gathered through the administration of questionnaires by eight research assistants. A covering letter was also attached to the questionnaire, which contained the research topic and a commitment that the data provided are to be used for academic purposes only and treated with utmost confidentiality. The data collection method was chosen because it not only has inherent benefits but enables a researcher to collect all the completed questionnaires in a short time period; it is less expensive and consumes less time in data processing (Sekaran, 2003). The questionnaire has four distinct parts. The first section elicits respondents' demographic information. The second section contains ten items relating to the participative budgeting variable. The third section consists of ten questions on organizational commitment, and the fourth section contains ten items related to managerial performance of budgeting activities.

To identify the problems connected with the content of the questions, their wording, sequence, and the mean (average) time to complete the questionnaire, a pilot study was conducted. According to Cooper and Schindler (2008), a pilot study assists in finding how the overall survey data quality can be improved. The responses from the pilot study enabled us to carry out an evaluation with respect to the adequacy of the questions. The evaluation indicated no consequential modification except the design layout of the instrument, which was appropriately handled. Through purposive sampling method, we

identified 150 medium-sized Sachet and Table Water producing firms that are registered with the Delta State Ministry of Commerce and Industry. We chose the purposive sampling technique because it has been used in similar studies and is applied only when certain persons (respondents) can provide the needed information or can conform to the research criteria stipulated (Sekaran, 2003). The sample consisted of managers or officers designated as the head of functional units who are involved in budgeting activities, and whose performance of these activities needed to be explored. The questions with respect to each of the variables under study in the questionnaire were measured using the five-point Likert scale of Strongly Agree = 5 points; Agreed = 4 points; Undecided or Not Sure = 3 points; Disagree = 2 points; Strongly Disagree = 1 point. The respondents were asked to circle which measurement for each question best describes his or her agreement. A total of 600 questionnaires were distributed within two months, out of which 520 were retrieved, giving a response rate of 87%. After a careful scrutiny of the retrieved questionnaires, we discovered that only 475 questionnaires were completely filled and found usable, yielding a 91% response rate.

The usable questionnaires were coded and the data generated were imported into Statistical Package for Social Sciences (SPSS) and SPSS Amos software for the purpose of processing the data to test the study stated hypotheses. We employed the Kaiser-Meyer-Olkin (KMO) to measure the sampling adequacy. A factor analysis of ten items for each variable was subjected to principal component analysis and 'none' rotation technique. The internal reliability of the measurement scales was tested using the Cronbach's alpha coefficient. The overall measure for each variable was achieved by averaging the responses for the ten individual items. Data analysis was performed based on descriptive statistics using the minimum, maximum, mean and standard deviation. Correlation test was used to determine the relationships among the variables. Multiple regression analysis was applied to test the influence of participative budgeting, organizational commitment and interaction of participative budgeting and organizational commitment on managerial performance of budgeting activities. The tool of analysis was chosen because similar studies have used it, and it allows one to examine the direct, indirect and spurious effects of the relationship among variables (Foster et al., 2006).

4.1. Presentation of a Data

As shown in Table 1 above, 72% of the respondents are male while 28% are female. In terms of age, 29% were under 20 years, 41% are between 21-35 years, 22% are between 36-50 years, and 8% are above 50 years. The majority of the respondents are in the age category of 21-35. Regarding work experience, 38% have less than 5 years of work experience, 40% have between 5-10 years of experience, 12% have between 11-20 years and 10% have 21 years and above. The respondents with the highest work experience fall into the 5-10 years of work experience. According to department, we have 25% of respondents from production, 35% from finance and accounts, 24% from sales and marketing while 16% from administration. Based on position held, we have 40% as managers, 32% as lower-level managers, 20% as unit heads, and 8% as supervisors. The highest number based on position is from managers. Budget experience indicates that less than 36% have 5 years of experience, 38% have between 5-10 years of experience, 22% have between 11-20 years of experience, and 4% have 21 years and above. Respondents with the highest budget experience fall into the 5-10 years category.

Table 1. Demographic Data of Respondents

Sex	Age	Work Experience	Dept	Position	Budget Experience
Male (72%)	Under 20 years (29%)	Less than 5 years (38%)	Production (25%)	Manager (40%)	Less than 5 years (36%)
	21-35 years (41%)	5-10 years (40%)	Finance and Accounts (35%)	Lower-level manager (32%)	5-10 years (38%)
Female (28%)	36- 50 years (22%)	11 – 20 years (12%)	Sales and marketing (24%)	Unit Head (20%)	11- 20 years (22%)
	50 and above (8%)	21years and above (10%)	Administration (16%)	Supervisors (8%)	21 years and above (4%)

Source: Questionnaire Analysis, 2022.

4.2 Result of Diagnostic Tests

Diagnostic tests were carried out to ensure the adequacy, reliability, and robustness of the data. These tests include the Kaiser-Meyer-Olkin (KMO) for sampling adequacy, factor analysis, principal component analysis, and Cronbach's alpha for the variables of participative budgeting, organizational commitment, and managerial performance. The results are presented below:

Table 2. Factor Analysis of Participative Budgeting Scale.

Items	Questions	Factor Loading
1	You are actively involved in drafting your division's budget	.901
2	It affords you the opportunity to set your division's budget objectives	.765
3	You supply inputs for budget preparation in your department	.806
4	During the budgeting process, you exchange information that refines the budget	.687
5	You are involved in the initiation of your departmental budget	.589
6	Your participation in your department's budget influences the final budget	.765
7	Participating in the budget preparation enhances your bonding with the organization.	.880
8	You are deeply involved in setting your departmental budget targets	.675
9	You are always engaged in your departmental budget discussions	.645
10	You play an important role during budget preparation	.894

For Table 2 above, the participative budgeting scale has ten items which were measured by a five-point Likert-type scale. The sampling adequacy based on the Kaiser-Meyer-Olkin (KMO) was 0.811. A factor analysis of the ten items was subjected to principal component analysis and none as a rotation technique. The outcome was that two factors were seen to have eigenvalues above 1. These factors explained only 54.113% of the total variance. The factor analysis yielded a Cronbach alpha coefficient of 0.74, indicating a very high internal reliability given the scale used, which, according to Sekaran (2003), can be relied upon. In this regard, an overall measure of the participative budgeting factor was constructed using the average responses of the ten items.

Table 3. Factor Analysis of Organizational Commitment Scale.

Items	Questions	Factor Loading
1	The more time I spent in budget discussion and preparation, the more my commitment to the organization is elicited	.781
2	Because of my engagement in the budgeting process, I put in effort beyond the norm to ensure the budget's success	.665
3	I accept any role given to me in the budgeting process, which ensures my commitment to budget implementation	.726
4	My involvement in the budgeting process inspires me a lot	.883
5	I am proud to be part of the organization because of the inclusiveness in budgeting	.532
6	Due to my role in budgeting, I am desirous to provide budget solutions besetting the organization, no matter the gravity	.752
7	The degree of budget engagement in the organization fuels my commitment to higher goals	.812
8	Involvement in budgeting has made me to take sides with the organization's goal	.656
9	I desire to maintain my membership of the organization because of my involvement in the budgeting process	.649
10	I am willing to demonstrate the right attitude toward goal commitment due to my involvement in budgeting	.814

Organizational commitment scale has ten items which were measured by a five-point Likert-type scale. The sampling adequacy based on the Kaiser-Meyer-Olkin (KMO) was 0.754. A factor analysis of the ten items was subjected to principal component analysis and none as a rotation technique. The outcome was that three factors were seen to have eigenvalues above 1. These factors explained only 57.186% of the total variance. The factor analysis yielded a Cronbach alpha coefficient of 0.87. This shows a very high internal reliability given the scale used which, according to Sekaran (2003), can be relied upon. In this regard, an overall measure of the organizational commitment was constructed using the average responses of the ten items.

Table 4. Factor Analysis of Managerial Performance Scale

Items	Questions	Factor Loading
1	My involvement in budgeting has improved my planning activities	.891
2	Participative budgeting has enhanced my investigative task	.855
3	Coordination has become easy due to my participation in budgeting	.801
4	I can now evaluate because of my engagement in budgeting	.787
5	Proficiency in Control and monitoring has been improved due to my involvement in budgeting	.889
6	The task of supervising has become less difficult given my involvement in budgeting	.665
7	My involvement in budgeting has enabled me to pursue and realise organizational goals over time	.780
8	My proficiency in regulation is getting higher with my involvement in budgeting	.775
9	My level of representation has improved due to participation in budgeting	.601
10	My achievements in negotiation have improved as a result of my involvement in budgeting	.841

As shown in Table 4 above, the psychological and personal factors' scale has ten items which were measured by a five-point Likert-type scale. The sampling adequacy based on the Kaiser-Meyer-Olkin (KMO) was 0.712. A factor analysis of the ten items was conducted using principal component analysis with no rotation technique applied. The outcome indicated that four factors were seen to have eigenvalues above 1. These factors only explained 61.295 % of the total variance. The factor analysis yielded a Cronbach alpha coefficient of 0.88; this shows a very high internal reliability, given the scale used which, according to Sekaran (2003), can be relied upon. In this regard, an overall measure of the psychological and personal factors was constructed using the average responses of the ten items.

Table 5. Descriptive Statistics and Pearson Correlation Matrix

Variables	N	Min	Max	Mean	STD	(1)	(2)	(3)	(4)
PB	475	1.27	5	3.68	.8021	1	.432(**)	.521(**)	.487(**)
OC*PB	475	2.68	5	4.24	.684	.432(**)	1	.364(**)	.513(**)
OC	475	3.13	5	4.36	.5475	.521(**)	.364(**)	1	.467(**)
MP	475	4.05	5	7.79	.9652	.487(**)	.513(**)	.467(**)	1

** Correlation is significant at the 0.01 level (2-tailed)

PB= Participative budgeting; PPF=Psychological and personal factor; OC= organizational commitment; MP= Managerial performance

From Table 5 above, the variable of managerial performance has the highest mean followed by organizational commitment; the next is psychological and personal factors while participative budgeting comes last. In terms of dispersion from the mean measured by standard deviation, the variable with the highest standard deviation is managerial performance, followed by participative budgeting, while the lowest is organizational commitment. In terms of the correlation analysis, participative budgeting is found to be positively and significantly correlated with the interaction between organizational commitment and participative budgeting, organizational commitment and managerial performance. The correlations were 0.432 ($p < 0.05$), 0.521 ($p < 0.05$) and 0.487 ($p < 0.05$) respectively.

4.3. Multiple Regression Analysis

To test the influence of PB, OC, and PB*OC on managerial performance of budgeting activities, the multiple regression tool was employed. The models are presented in equation form as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

where:

Y = Managerial performance of budgeting activities

β_0 = Constant

β_1 = Coefficient of participative budgeting

X_1 = Participative budgeting

B_2 = Coefficient of organizational commitment

X_2 = Organizational commitment

B_3 = Coefficient of the interaction of PB*OC

X_3 = Interaction of PB*OC

e = Error term

The model in a testable form is expressed as:

$$Y = \beta_0 + \beta_1PB + \beta_2OC + \beta_3PB*OC + e$$

In the above model, the interaction term is the average scores of PB and OC multiplied. This method was employed to test the interaction because, according to Gul et al., (1995), it is acceptable. The result of the multiple regressions is presented in Table 6 below.

Table 6. Regression Results of Participative Budgeting, Organizational Commitment, Interaction of Participative Budgeting and Organizational Commitment on Managerial Performance

Independent (or Predictor)variables	Non-Standard Beta	Standard beta	T-Value	Probability
Bo (constant)	5.681		21.021	.000
PB	.396	.256	4.325	.000
OC	.632	.392	5.924	.000
OC*PB	.258	.609	7.345	.000
F= 48.653;p=.000 ;R =0.645 ; R ² = 0.326				

Dependent variable: Managerial Performance

From Table 6 above, the standardised beta coefficient of participative budgeting, organizational commitment and interaction of participative and organizational commitment are positive and significantly influence managerial performance of budgeting activities. The independent variables explained 32.6% of the variance associated with the managerial performance score. Thus, the hypotheses H1, H2 and H3 are accepted. The results indicate that the direct influence of participative budgeting, interaction of organizational commitment and participative budgeting, and organizational commitment on managerial performance was positive and significant. The beta values were .256 (t=4.325, p=.000); .609 (t=7.345, p= .000); and .392 (t=5.924, p=.000) respectively. Thus, the predicted hypotheses show that as the managerial performance scores increases, the values of the independent variables -participative budgeting, organizational commitment and the interaction of participative budgeting, organizational commitment will also increase due to their positive standard betas. Overall, the independent variables were able to explain variations in managerial performance to the extent of 64.5% while 35.5% was attributed to factors not included in the model. The overall result shows that the F-value is 48.653, which is statistically significant, given a p-value of .000.

5. Discussion of Results

5.1. Participative Budgeting and Managerial Performance

Hypothesis one (H1) states that participative budgeting has a significant influence on managerial performance. According to Table 6 above, the coefficient of participative budgeting is .256, with a t-value of 4.325 and an associated p-value of .000 that is less than 5% significant level. This connotes that participative budgeting has significant positive influence on managerial performance. It shows that a 1% change in participative budgeting would bring about 25.6 percent influences on managerial performance. Thus, increased participation of managers in budgeting activities will bring about increased managerial performance in those activities. Therefore, when managers are allowed to participate in the budgeting process, it results in performance improvement in their budgeting activities. Accordingly, the first objective of the study is achieved by this finding. This finding is similar to the results of previous studies undertaken by Suwanto et al. (2022), Ramses and Yvonne (2019), Yunika et al. (2020), Syakieb et al. (2018), Hariyanto (2018), Noor and Othman (2012), Yahya et al. (2008), Yuen (2007), leach-Lopez (2007), Chong and Johnson (2007), Chong and Chong (2002), and Nouri and Parker (1998). However, contrary to the findings of Musoke and Nyonyintono (2017), which states that participatory budgeting is not related to performance but rather is a predictor of customer satisfaction, and Andry (2014), which reveals that participative budgeting has a significant negative influence on managerial performance.

5.2. Organizational Commitment and Managerial Performance

Hypothesis two (H2) was equally supported by its associated result shown in Table 6. The hypothesis predicts that organizational commitment has a significant positive influence on managerial performance. This was underscored by the positive standard beta of .392, which is statistically

significant. It indicates that organizational commitment positively and significantly influences managerial performance of budgeting activities. As a result, a 1% change in organizational commitment would bring about 39.2 percent influences on managerial performance. Thus, increased organizational commitment of managers in budgeting activities will bring about increased managerial performance of those activities. Thus, the second objective of the study was achieved based on this finding. The finding corroborates the results of Ramses and Yvonne (2019), Andry (2014), Noor and Othman (2012), Yahya et al. (2008), Kristin (2002), Nouri and Parker (1998), and Parker and Kyj (2006). It is however contrary to the findings of Yunikal et al. (2020), which reported that organizational commitment does not positively affect managerial performance.

5.3. Interaction of Participative Budgeting and Organizational Commitment and Managerial Performance.

Hypothesis 3 regards testing the interaction effect of participative budgeting and organizational commitment on managerial performance. The results in Table 6 show that the standard beta of the interaction of participative budgeting and organizational commitment is .609, which is positive and statistically significant. It means that the interaction of participative budgeting and organizational commitment has a positive and significant influence on managerial performance of budgeting activities. As such, a 1% change in the interaction of participative budgeting and organizational commitment of managers would bring about 60.9 percent influences on managerial performance. Thus, increased interaction of participative budgeting and organizational commitment of managers in budgeting activities will bring about increased managerial performance in these activities. This finding indicates that the third objective of the study was fulfilled. The finding is in agreement with earlier studies of Syakieb et al. (2018), Hariyanto (2018), Hashim, et al. (2014), Jermias and Yigit (2013), Yahya et al. (2008), Melek (2006), Nouri and Parker (1998) while in disagreement with the findings of Yunika et al. (2020) and Parker and Kyj (2006) that found indirect influence of the interaction of participative budgeting and organizational commitment on managerial performance.

Overall, the results obtained seem to affirm, in practice, the existence of social cognitive theory. Practically, it has helped to identify the psychological and behavioural variables of participative budgeting, organizational commitment, and the interaction of participative budgeting and organizational commitment. These variables tend to influence managers to define goals, promote an environment of confidence to execute tasks, support relationships, enable self-efficacy to establish and achieve goals, and to overcome difficulties which can shape managers' mental state, their attitudes and beliefs. All of these, in context, would provide a practical basis for understanding and providing plausible explanations for managerial performance in budgeting activities

6. Conclusion

The findings from the study have provided additional evidence on the influence of participative budgeting, organizational commitment, and the interaction of participative budgeting and organizational commitment on managerial performance in budgeting activities. The results obtained have significant policy implications on how top management can cause managers to actively participate in budgeting, instil a sense of commitment, and improve the performance of budgeting activities. It helps to connect theory to practice, as managers, unit heads, and supervisors' behaviour tends to be stimulated by participative budgeting, which, in turn, has led to increased performance. The study therefore recommends that it is imperative for managers, supervisors, and unit heads to be allowed to play important roles in budget initiation, target setting, discussions, preparation, control and evaluation. With this level of involvement in the budgeting process, it would not only increase their commitment but also foster a sense of inclusiveness, ownership, happiness, motivating them to trust the budget and feel responsive to implement the budget to achieve its stated objective. Despite the profound results obtained and the associated practical policy implications, we acknowledge that the study was not free from limitations. The study only focused on Sachet and Table water producing firms. Data were only obtained from managers, heads of units and supervisors which can introduce bias. The instrument of data collection, which constrained respondents' response, is another limitation. However, we believe that the methodological approach used in the collection of data and the statistical tools employed, to a large extent, helped to minimize the bias possibilities in the analyzed data. To this

end, we recommend further studies to investigate the influence of job satisfaction and motivation, which could arise due to budget participation and organizational commitment, with the aim to possibly ascertain whether they have any effect on the impact of participative budgeting on managerial performance.

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APPENDIX:**QUESTIONNAIRE ON THE RELATIONSHIP BETWEEN PARTICIPATIVE BUDGETING AND MANAGERIAL PERFORMANCE AND THE MEDIATING VARIABLE OF ORGANIZATIONAL COMMITMENT**

Please tick as appropriate

- 1 Sex : (a) Male () (b) Female ()
- 2 Age : (a) Under 20 years () (b) 21 -35 years () (c) 36 -50 years () (d) 50 years and above ()
- 3 Work experience : (a) Less than 5 years () (b) 5 -10 years () (c) 11 -20 years () (d) 21 years and above ()
- 4 Which division or department do you belong to in your firm?
(a) Production () (b) Finance and Accounts () (c) Sales and Marketing () (d) Administration ()
- 5 What is your position in your division?
(a) Manager () (b) lower-level Manager () (c) Line officer ()
- 6 What is your level of budget experience: : (a) Less than 5 years () (b) 5 -10 years () (c) 11 -20 years () (d) 21 years and above ()

Below is a list of statements about participative budgeting, organizational commitment and managerial performance. Kindly indicate the extent of agreement or disagreement using the following codes: SA= Strongly Agree, A= Agreed, UD =Undecided or Not Sure, D= Disagree, SD= Strongly Disagree

S/N	DESCRIPTION	SA	A	UD	D	SD
	SECTION A: BUDGET PARTICIPATION					
1	You are actively involved in drafting your our division's budget					
2	It's afford you the opportunity to set your division's budget objectives					
3	You supply inputs for budget preparation in your department					
4	During the budgeting process you exchange information that refine the budget					
5	You are involved in the initiation of your departmental budget					
6	Your participation in your department's budget has an influence on the final budget					
7	Participating in the budget preparation enhances your bonding with the organization.					
8	You are deeply involved in setting your departmental budget targets					
9	You are always engaged in your departmental budget discussions					
10	You play important role during budget preparation					
	SECTION B: ORGANIZATIONAL COMMITMENT					
11	The more time I spent in budget discussion and preparation has elicited more of my commitment to the organization					
22	Because of my engagement in the budgeting process I put effort beyond the normal to see that the budget is successful					
13	I accept any role given to me in the budgeting process which ensures my commitment to the budget implementation					
14	My involvement in the budgeting process inspires me a lot					
15	I am proud to be a part of the organization because of the inclusiveness in budgeting					
16	Due to my role in budgeting, I am desirous to provide					

- budget solutions besetting the organization no matter the gravity
- 17 The degree of budget engagement in the organization fires up my commitment to higher goals
- 18 Involvement in budgeting has made me to take sides with the organization's goal
- 19 I desire to maintain my membership of the organization because of my involvement in the budgeting process
- 20 I am willing to demonstrate the right attitude to goal commitment due to my involvement in budgeting
- DESCRIPTION FOR SECTION C: MANAGERIAL PERFORMANCE IN TASKS**
- 21 My involvement in budgeting has improved my planning activities
- 22 Participative budgeting has enhanced my investigative task
- 23 Coordination has become easy due to my participation in budgeting
- 24 I can now evaluate performance because of my engagement in budgeting
- 25 Proficiency in Control and monitoring has been improved due to my involvement in budgeting
- 26 The task of supervising has become less difficult given my involvement in budgeting
- 27 My involvement in budgeting has made me to pursue and realise organizational goals over time
- 28 My proficiency in regulation is getting higher with involvement in budgeting
- 29 My level of representation has improved due to participation in budgeting
- 30 Negotiation achievement has become better as a result of my involvement in budgeting