

Budgetary Control Techniques and Performance Management in Plateau State University Bokokos, Nigeria

Ishaku Longji Jan¹; Bako Elisha Danazumi²; Patience Sendi³; Yohanna Gyang Jugu⁴ & Damul Mikat Bulus⁵

^{1, 2, 4}Department of Accounting, Plateau State University Bokokos

³Department of Accounting, Karl Kuum University Vom, Plateau State

⁵Bursary Department, Plateau state University, Bokokos

Email: janlongji@plasu.edu.ng

ABSTRACT

This study examined the relationship between budgetary control techniques and performance management in Plateau state University Bokokos. Nigeria. The study employed a field survey that is cross-sectional. The population of the study consists 60 staff in the bursary and audit department of Plateau State University of Bokokos and a sample size of 52 using Krejcie and Morgan (1970) sample size determination formula as well as purposive sampling technique which was adopted. This study employed the used of structured questionnaire as method of data collection and the hypotheses were tested using multiple linear regression as method of data analysis. Findings revealed that there is a significant relationship between budget planning, budget monitoring and control and performance management in the Plateau State University Bokokos. This study recommended that management of the university should integrate budget planning with strategic planning to ensure that the University's budget is aligned with its strategic goals, it is essential to integrate budget planning into the strategic planning process. This will enable the university to allocate resources in the most efficient and effective way possible.

Keywords: Budget, Budgetary Control Techniques, Performance Management,

1. INTRODUCTION

The public sector plays a crucial role in the provision of essential services such as healthcare, education, and security to citizens. To achieve its mandate effectively, the public sector requires a robust budgetary control system to ensure efficient and effective use of public funds. Budgetary control refers to the process of establishing budgets, monitoring actual performance against the budget, and taking corrective

action where necessary (Kashif, 2013). The Nigerian public sector has a long history of inadequate budgetary control systems, characterized by poor budget planning and management. The financial scandals that have rocked the Nigerian public sector over the years have been attributed to the lack of proper oversight and control measures (Azibaraniyar, 2023). However, the Nigerian government has made some efforts to improve budgetary control systems across public institutions and agencies. In the university sector, key reforms such as the National University Commission Reform Act of 2004 mandated the establishment of governing councils in public universities to enhance financial autonomy and accountability. The concept of budgetary control is important in promoting financial management, accountability, and transparency in public institutions. Effective budgetary control techniques also help minimize wastage and ensure that public institutions operate within their allocated resources (Haque, 2019).

Performance management refers to the process of measuring, monitoring, and improving an institution's performance against predetermined goals and objectives. In the public sector, the aim of performance management is to ensure that public institutions provide high-quality services efficiently and effectively. Performance management techniques provide insights into how well an institution is achieving its objectives and how it can improve performance in critical areas (Mampane, 2020). Plateau State University Boko was established in 2006 as one of the first indigenous public universities in the country. The University is currently ranked as one of the top ten universities in Nigeria based on the Webometrics Ranking of World Universities. However, like many other public institutions in the country, the University has faced financial challenges over the years, with limited resources to support its programs and services. The University has had to rely on budgetary support from the State Government and other funding agencies to sustain its operations.

Budgetary control is a technique applied to the control of total expenditure on materials, wages and overhead by comparing actual performance with planned performance. This technique is also believed to be another valuable aid in cost control and coordination (Mkrue, 2013). Nigeria started the practice of government budget through National Planning Commission. However, at the beginning, it was not structured in such a way as to permit efficient financial administration, but through time period continuous modification of the budget system was made before it attained its present status (Miju & Girma, 2014). In Nigeria, Public sector offices are part of the public body which is partly or wholly financed by government budget and concerned with providing basic government services to the whole society which is achieved through controlling public finance and, controls are mainly inbuilt in the public financial management system. Public performance management includes the legal and organizational framework for supervising all phases of the budget cycle, including the preparation of the budget, internal control and audit, procurement, monitoring and reporting arrangements, and external audit. The broad objectives of

public performance management are to achieve overall fiscal discipline, allocation of resources to priority needs, and efficient and effective provision of public services (Mof, 2007).

The issue of performance management in the public sector has been a longstanding challenge in many organizations. The Plateau State University Bokokos is not an exception to this challenge as it also faces the challenge of effectively managing the performance of its employees. Over the years, the university has experienced a decline in its productivity and overall performance. This has led to dissatisfaction among stakeholders, including students, parents, staff and the government.

According to Benjamin and Asen (2018), it was reported that ineffective performance management systems have been identified as a significant factor contributing to the poor performance of public-sector organizations. According to the study, ineffective performance management techniques could result in shortcomings such as low morale, decreased productivity, and lack of motivation amongst employees. The Plateau State University Bokokos is no stranger to these challenges, which are further exacerbated by a lack of clear and well-established performance management systems. The absence of well-defined performance indicators, performance targets, feedback mechanisms, and reward systems has led to a culture of complacency and lack of accountability amongst employees.

In 2019, the Plateau State Government, through the State Universal Basic Education Board, identified performance management as a critical factor affecting educational outcomes. This government's report acknowledged that the lack of comprehensive performance management systems in public schools has led to a decline in the quality of education in the state. The report recommended that performance management systems should be established, and these should include employee evaluation criteria, feedback mechanisms, and reward systems for exemplary performance. In the view of Tella et al. (2019) pointed out the significant role that performance management plays in organizational effectiveness and highlighted the need for organizations to develop an effective performance management system. The authors noted that "an effective performance management process must align performance goals with the organizational objectives, provide continuous feedback, and link performance outcomes with incentives and rewards." (Tella et al., 2019).

Given the foregoing, it is evident that the Plateau State University Bokokos needs to establish an effective performance management system that will enhance productivity and ultimately improve university performance. Such a system will be improved with an effective budgetary control technique. However, the effectiveness of budgetary control techniques and performance management practices at Plateau State University Bokokos remains underexplored. Budgetary control techniques such as budget planning, budget monitoring and control are effective tools in promoting

performance management in institutions of government. Budget planning is seen as the process through which an organization creates a financial plan for a specified period. It is widely acknowledged that proper budget planning is a prerequisite for effective financial management in the public sector. Budget monitoring and control are fundamental elements of effective budgetary control techniques. It enables an organization to track actual performance against budget, identify variances and take corrective action when necessary. Therefore, it appears that no researches have been conducted on the relationship between budgetary control techniques and performance management, particularly in the in the Nigerian universities. This study therefore seeks to fill these gaps by examining the relationship between budgetary control techniques and performance management at Plateau State University Boko. The following research questions are raised based on issues raised in the statement of the problem

- i. To what extent does budget planning relate with performance management in the Plateau State University Boko?
- ii. What is the relationship between monitoring and control and performance management in the Plateau State University Boko?

The main objective of the study is to examine the relationship between budgetary control techniques and performance management in Plateau state University Boko. The specific objectives are as follows:

- i. To determine the relationship between budget planning and performance management in Plateau State University Boko.
- ii. To assess the relationship between budget monitoring and control and performance management in Plateau State University Boko.

The following research hypotheses are stated in null form:

- i. **H₀₁:** there is no significant relationship between budget planning and performance management in Plateau State University Boko.
- ii. **H₀₂:** there is no significant relationship between budget monitoring and control and performance management in Plateau State University Boko.

2. LITERATURE REVIEW

According to Otley (1978), the performance of management in an organization is mostly determined through managerial efficiency and managerial effectiveness. Evaluation of managerial efficiency is a determination of whether organizational outcomes are being optimized at a given level of resources or whether a given level of organizational outcome is being realized at the least possible costs. Meanwhile, assessment of management effectiveness involves determining whether management is making viable decisions and taking correct actions (Otley, 1978). Managerial performance is the extent to which managers achieve the organizational goals through their traditional functions which include planning, coordinating, controlling, organizing, etc. Managerial performance can as well be conceived as organizational

performance whereby the financial and non-financial performance indicators will be used to measure managers' performance.

Budgetary planning is seen to be the process of forecasting future events, and how activities should be handled based on predetermined goals set by an organization. Bosco (2017) reported that budgeting framework entails plans for a short term, long-term, and strategic plan. The budgets are applied based on the planned collection of conditions or situation prior to the budget periods (Myint, 2019). Budget benefit for the entire company is provided by considering both long term and short term effects of budgets (Nso, 2020). The annual budgeting process, however, leads to these strategies being refined, as managers must create comprehensive plans for the execution of the long-term goals. The stresses of daily operations will make managers unable to schedule their future operations without the annual budgeting process (Daniel, 2017).

In order to carry out budgetary control, it is necessary to formulate a fully coordinated detailed plan in both financial and quantitative terms for a forthcoming period. The duration of the period is usually one year. The plan needs to be in line with the long-term development strategy of the organization, although in the shorter term of a budget year, conditions may prevail which could dilute this aim. For example, a depressed economy could lead to a temporary departure from the long-term plans. Therefore, before formulating the budgets, the policy to be pursued during the forthcoming trading period needs to be established (Dunk, et al, 2001). Once budgets are operating throughout an organization, it is important that feedback is made available to the managers responsible for its operation. This is often done by means of monthly budget reports. These reports contain comparisons between the budget and the actual position and throw up differences which are known technically as variances. The budget plans must be properly coordinated in order to eliminate bottlenecks. Individual budgets should be coordinated with one another to ensure that the implementation process is conducted effectively in order to save time and costs (Horngren, Forster & Dater, 1997). To facilitate proper planning, the management team should define the patterns of expenditure and revenue over the life of the project or the activity that the organization is undertaking. This is to ensure that a predetermined budget of possible costs that was incurred in carrying out the activities in a project should be made. Realistic planning of finances is a key to the implementation of a project or programme (Joshi & Abdulla, 2013).

Monitoring and control of budget process is a determinant of effectiveness, once the budgets have been implemented they need to be monitored and controlled to ensure effectiveness in aligning budgets over a defined period of time (Horngren et al., 1997). Despite the laudable benefits of budgeting, its preparation, implementation and execution need to be controlled and monitored to avoid deviations from the plan and serve as a basis for revising the budget put in place. Challenge of preparation implementation and human factors that tend to affect budgeting need to be given serious thought. In the preparation of the budgets, management should give serious thought to the external environment, emerging technologies, organizational structure

and size as well as culture of the organization and the setting where the timber firms operate (Frimpong, 2013).

Nso (2020) opined that budgetary surveillance and reporting processes are systemic and continuous and defined by establishing targeted success or activity levels by defining the goals to be accomplished within any branch of the enterprise. Agbenyo, Danquah and Wang (2018) stated that financial supervision and regulation assures that the program implemented within the accountability mechanism is reliable and cost-effective. On the other hand, budgetary controls are mechanisms by which a budgetary schedule is developed and real expenditure is regularly likened to the plan to decide whether adjustments are required to keep tracks (Nso, 2020). Daniel (2017) posited that budgetary control is a powerful business tool which, in the future, never prevents the right planning, productive coordination and control to optimize income. Robinson and Last (2009) argue that budgetary control is characterized as a policy developed by the company management for comparative purposes between the real and the budgeted outcomes related to the achievement of a specific goal. Planning, organization and monitoring are the fundamental aims of budgetary control, as one without discussing the other is impossible to address (Kipkemboi, 2013). Inadequate budget controls contribute to the failure to clarify targets and the failure to maintain or achieve results. This affects productivity, when workers don't know what to do, where or how to do it or are doubtful and waste a lot of time looking at managers to clarify (Nso, 2020).

The underpinning theory of this study is the control theory. The Control theory provides an effective approach to ensure that actual results conform to planned results. By setting performance standards, monitoring and evaluating performance, and taking corrective measures, performance in Plateau State University will be improved. It is therefore suggested that Plateau State University adopts budgetary control using the control theory technique as a critical tool for effective performance management. Control theory was propounded by William Glasser in the year 1950. The control theory of budgetary control focuses on ensuring that actual results align with planned results, as stipulated in the budget. It operates under the assumption that there is an ideal performance standard, and the actual performance can be measured against that standard. Thus, the purpose of budgetary control using the control theory is to detect variances, investigate the causes, and make necessary corrective actions (Adebayo, 2019).

In Plateau State University, budgetary control using the control theory will ensure that resources are allocated efficiently and effectively. As a new institution venturing into uncharted territory, it is essential to set a benchmark for performance management, and this can be done by applying the control theory of budgetary control technique. In line with the control theory of budgetary control technique, Plateau State University will set performance standards for its faculty, staff, and students. The standards will be measurable, and periodic monitoring and evaluation will be carried out to ensure that they conform to the planned results, as stipulated in the budget. Performance indicators such as student enrollment rate, teaching quality and research

productivity will be considered in evaluating the performance of faculty and staff (Kamma, 2017).

Budgetary control using the control theory in Plateau State University will require that reports be submitted, analyzed, and corrective action taken if necessary. The reports should include revenue and expenditure analysis, and a variance analysis report should be generated. A variance analysis report compares actual performance with budgeted performance, identifying causes of any variance, and outlining corrective measures. The report will be essential in improving performance and accountability in Plateau State University ((Adebayo, 2019)

Adeyemo et al. (2019) assessed the impact of budgetary control techniques on performance management in Nigerian public sector organizations. The study utilized a cross-sectional survey design, and data was collected from 110 public sector organizations using a structured questionnaire. Regression analysis was conducted to analyze the data. The study found that the use of budgetary control techniques had a positive and significant impact on performance management in Nigerian public sector organizations. The study recommended that public sector organizations should adopt budgetary control techniques to enhance their performance management practices.

Naseri (2020) investigates the relationship between budgetary control techniques and organizational performance in Malaysian public sector organizations. A cross-sectional survey design was used, and data was collected from 125 Malaysian public sector organizations using a structured questionnaire. The data was analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The study found that budgetary control techniques had a positive and significant impact on organizational performance in Malaysian public sector organizations. The study recommended that Malaysian public sector organizations should adopt effective budgetary control techniques to enhance their performance.

Ahmed et al. (2019) investigated the impact of performance management on the budgetary control system in Pakistani public sector organizations. The study used a cross-sectional survey design, and data was collected from 150 public sector organizations in Pakistan using a structured questionnaire. The data was analyzed using partial least squares structural equation modeling (PLS-SEM). The study found that performance management had a positive and significant impact on the budgetary control system in Pakistani public sector organization. The study recommended that public sector organizations in Pakistan should focus on performance management as a key driver of effective budgetary control practices.

Salusu (2018) examine the impact of budgetary control techniques on performance management in Nigerian public sector organizations. The study used a cross-sectional survey design, and data was collected from 104 public sector organizations in Nigeria using a structured questionnaire. The data was analyzed using descriptive statistics, correlation analysis, and regression analysis. The study found that the use of budgetary control techniques had a significant impact on performance management in Nigerian public sector organizations. The study recommended that

Nigerian public sector organizations should adopt budgetary control techniques to improve their performance management practices.

Alu, Shiyanbola, and Gbolahan (2021) investigated what effect budgeting has on SMEs sustainability in Lagos state. Survey research design was used. Population consists of 11,643 registered SMEs in Lagos state. 387 SMEs owners were purposively considered as the sample. Questionnaire served as the research instrument. Validity and reliability were premised on Cronbach Alpha Coefficients which, revealed values from 0.703 to 0.954. Descriptive and inferential statistics were employed for data analysis. Findings revealed that budgeting significantly affected net profit margin of SMEs in Lagos state, Nigeria (Adj.R²=0.420, F(4, 360)=66.925, p<0.05); budgeting significantly affected cash liquidity (Adj.R²=0.352, F(4, 360)=50.488, p<0.05) and budgeting significantly affected surplus return on investment development index of SMEs in Lagos state, Nigeria (Adj.R²=0.401, F(4, 360)=61.999, p<0.05). Budgeting significantly affects sustainability of SMEs in Lagos state, Nigeria. SMEs owners should ensure that components of budgeting (motivation and communication of budgets, planning, monitoring and control and participative budgeting) are embraced in planning of finances to ensure that going concern is actualised.

Olaniyan and Efuntade (2020) examined budget and budgetary control system on financial performance of tertiary institution in Nigeria. It specifically investigated the relationship between, Budget Planning Monitoring and Control, budget participation, budget evaluation, operating cash flow, current ratio, debt equity ratio and asset turnover in Nigeria. This study adopted ex-post facto research design. Relevant data regarding the variables under-study were extracted from the Central Bank of Nigeria (CBN) statistical bulletin. The study period covered fifteen (15) years spanning from 2004 to 2019, while error correction model was used to analyze the data. The findings revealed among other things that; there was presence of co-integration (long-run relationship) among the variables in the model, budget planning, budget evaluation, control and monitoring have significant relationship with financial performance in Nigeria, while budget participation is not significantly related to financial performance of the tertiary institution in the long run. The study therefore concluded that there is significant relationship budgetary control system and financial performance of tertiary institution in Nigeria, depending on the variable of interest. Likewise, the study recommended among other things that government should ensure efficiency and effectiveness in the budgeting and budgetary control system due to the insignificant influence of budget participation on financial performance both in the long run and short run which is a pure indication of poor budgeting and budgetary control in the country.

Chaudhary (2018) examines the relationship between budgetary control and financial performance of Nepal Oil Corporation (NOC) while presenting the real scenario of the organization. Therefore, to test the practice of budgetary control and financial performance, a descriptive survey design, as a sample of the study, was used to gather data through structured questionnaire distributed to 60 respondents from Account, Finance, Administration, Engineering and Project Department. The findings

of this study emphasize that a practice of budgetary control leads to increased profitability but for that management commitment is indispensable. The study concludes that budgetary control process shows a significant positive bearing on the financial performance of NOC through the influences on financial objectives, allocation of funds as well as investment ventures. The study recommends a sensitization of management and employees of NOC along the lines of the importance of budgetary controls in enhancing financial performance, avoidance of unnecessary interference in the budgetary process and use of budgets as tools for management efficiency.

Oluwatoyin et al. (2020) examines the effect of budget planning as budgetary control mechanism put in place on financial accountability in the public sector of Ondo State Ministry, Departments and Agencies. The study made use of a structured close-ended questionnaire to obtain the required primary data from the target budget officers. Out of 118 budget officers on the ground in Ondo State Ministries, Departments and Agencies (MDAs) as at the time of this investigation, a purposive sampling technique was used to select 91 of which 85 copies of the questionnaire were returned. Cronbach's Alpha on a threshold of 0.7 was used to ascertain the reliability of the data collected through the research instrument. Logistic regression analysis was employed to test the hypothesised effect of examined budget planning on financial accountability in the public sector. Findings through the analysis revealed that the correlation coefficient between financial accountability and budget planning is 0.530. The univariate model logistic regression results revealed that budget planning has the ability to improve financial accountability in Ondo state public sector since the coefficient $B = 0.495$ (Wald = 15.601; p-value = 0.000) is positive and statistically significant at 0.01 level. The odd ratio $\text{Exp}(B) = 1.640$ suggests that the higher the improvement on budget planning, the higher the likelihood of improving/increasing financial accountability in Ondo state public sector. This study concludes that in order to achieve financial accountability in Ondo state MDAs, factor such as budget planning should be accorded utmost priority. The study, therefore, recommends that improved adherence to personnel budget ceiling should be accorded prompt attention to enhance financial accountability in the state.

Alsaqour et al. (2018) investigates the relationship between budgetary control practices and performance management in Jordanian public sector organizations. A cross-sectional survey design was used, and data was collected from 203 public sector organizations in Jordan using a structured questionnaire. The data was analyzed using descriptive statistics and regression analysis. The study found that budgetary control practices had a positive and significant impact on performance management in Jordanian public sector organizations. The study recommended that Jordanian public sector organizations should adopt budgetary control practices to enhance their performance management practices.

3. METHODOLOGY

This study employed a survey design that is cross-sectional as opposed to longitudinal survey to enable the collection of data for both the dependent and the independent variable at the same point in time. The population of the study consist 60 staff in the bursary and audit department of Plateau State University of Bokkos. This is because, the two departments have full accounting knowledge and are saddled with the responsibility of preparing the institution's budget.

In determining the sample size for the study, Krejcie and Morgan (1970) sample size determination formula was used. According to the table, for a population of 60 the required sample size is 52. Therefore, the sample size for this study is 52. This study employed the use of purposive sampling technique to sample a total of 52 respondents. The purposive sampling is a type of non- probability sampling that is most effective when one needs to study a certain cultural domain with knowledgeable experts within (Tongco, 2007). The instrument for collecting primary data for this research was questionnaire which requires to rate the opinions of respondents on some specified categories on five-point Likert scales. The questionnaire consists of closed-ended questions that are related to the study variables. The study employed the use of multiple regression was used to test the direct association between the independent and the dependent variable.

The regression model for testing the hypotheses is in the form

$$PM = b_0 + b_1BP + b_2BMC + e_j$$

Where:

PM = Performance Management

BP = Budget Planning

BMC= Budget Monitoring and Control

b_0 , = constant

b_1, b_2, b_3, b_4 = are the regression coefficients

e_j = error term

Normality

To confirm whether the data the meet assumption of normality, statistical method was used as such can give an objective basis for interpretation. For the statistical method, the Kolmogorov-Smirnov Shapiro-Wilk was employed and tested.

Table 1:
Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Budget Planning	.267	47	.274	.881	7	.843
Budget Monitoring and control	.205	47	.484	.931	47	.292
Performance Management	.216	47	.495	.901	7	.591

Source: SPSS Output v. 26

And from the result on Table 1, both tests are non-significant ($p > 0.05$). The data therefore, meets the assumption of normality.

Test of Homogeneity of Variance

Field (2009) suggests the use of Levene's test. This was applied in the current study. The rule of thumb to establish homogeneity is that the Levene statistics should not be significant and the variances of all the variables shall be equal.

Table 5
Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
Budget Planning	Based on Mean	.121	4	2	.974
Budget Monitoring and control	Based on Mean	4.872	4	42	.073
Performance Management	Based on Mean	.626	4	42	.646

Source: SPSS Output v.26

Homogeneity of variance is sustained when the Levene's value is not significant Field, 2009; Hair et al., 2010). Table 5 indicates that the Levene's value for all the study variables are not significant implying that the assumption of the homogeneity is upheld.

Multicollinearity

This is where three or more independent variables are highly correlated. To screen for multicollinearity, Variance Inflation Factor (VIF) and tolerance level were examined through regression results from the SPSS.

Table 6
Multi-collinearity

Coefficients ^a			
Model		Collinearity Statistics	
		Tolerance	VIF
1	Budget Planning	.864	1.158
	Budget Monitoring and control	.821	1.218
a. Dependent Variable: Performance Management			

From table 6, it is clearly seen that the VIF and the tolerance values do not exceed 10 and are not less than 0.10 respectively. The independent variables are therefore correlated

4. RESULTS/INTERPRETATION/DICUSSION OF FINDINGS

Descriptive Statistics

The descriptive analysis is seen basically from the behavior of the descriptive statistics and the correlations. The above parameters are necessary to check if the statistical mean of the data provides a good fit of the observed data (descriptive statistics).

Table 8:

Descriptive statistics for the study variables

	Minimum	Maximum	Mean	Std. Deviation
Budget Planning	1.00	3.40	1.9362	.61164
Budget Monitoring and control	1.00	4.40	2.4085	.93433
Performance Management	1.20	4.40	2.4383	.95338

Source: SPSS Output v.26

The descriptive statistics for the study variables are presented in Table 8 The results indicate that the mean score of the latent variables range between 1.94 and 2.45 on a 5- point Likert scale, while the standard deviation ranges between 0.61 and 0.99. The standard deviations are small relative to their respective means, implying that the statistical mean provides a good fit of the observed data (Field, 2009).

Test of Hypotheses

A multiple regression analysis was then employed to test the association between the predictors and the criterion variables and hypotheses earlier formulated in the study. Table 12 presents the results.

Table 12

Table of Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.793	.417		4.298	.000
	Budget Planning	.251	.170	.161	1.474	.014
	Budget Monitoring and control	.373	.114	.365	3.265	.002

a. Dependent Variable: Performance Management

$R = .754^a$; $R^2 = .568$; Adjusted $R^2 = .527$

H0₁: there is no significant relationship between budget planning and performance management in Plateau State University Bokokos. From the regression analysis run, given the coefficients in table 12 above, it shows that there is positive

and significant relationship between budget planning and performance management, given ($\beta = 0.161$, $t = 1.474$; sig. 0.014). Thus, that there is positive and significant relationship between budget planning and performance management.

H0₂: there is no significant relationship between budget monitoring and control and performance management in Plateau State University Bokokos. From the regression analysis run, given the coefficients in table 12 above, it shows that there is positive and significant relationship between budget monitoring and control and performance management, given ($\beta = 0.365$, $t = 3.265$; sig. 0.002). Thus, that there is positive and significant relationship between budget monitoring and control and performance management.

DISCUSSION OF FINDINGS

The test of hypothesis 1 shows that there is significant relationship between budget planning and performance management in Plateau State University Bokokos. This shows that budget planning explained 56.8% of performance management, this is because Budgetary planning (BP) is the process of producing a budget and using it to control business operations, it reduces the risk that an organization's financial achievements will be worse than expected, it encourages managers to achieve goals and thereby, establishing organization control. Also, it helps management to achieve a certain level of performance and it ensures that training of staff is necessary before they can adequately utilize budgetary control in the university such as bokokos. Hence, the implications of the finding is that an improvement in budget planning will lead improvement in performance management. This finding is in line with the findings of Salusu (2018) who assert that budget planning has significant relationship with performance management in the public sector.

The hypothesis 2 revealed that there is significant relationship between budget monitoring and control and performance management in Plateau State University Bokokos. This implies that a significant change in budget monitoring and control will result to a change in performance management. This is because it assists management to assess the level of performance in the University, it is an effective mechanism for financial planning and control that enhanced performance of management in the university, performance of management is enhance through budget committee within the university with effective evaluation dependent upon adequate communication in the university. This finding corroborates the findings of Olaniyan and Efuntade (2020) who examined budget and budgetary control system on financial performance of tertiary institution in Nigeria. The implications of the findings is that an improvement in budget monitoring control lead to an improvement in performance management.

5. CONCLUSION AND RECOMMENDATIONS

Conclusion

The main objective of the study was to examine the relationship between budgetary control techniques and performance management in Plateau State University, Bokokos, Nigeria. Specifically, the study examines the relationship between budget planning, budget monitoring and control, budget evaluation, budget participation and performance management. From the findings, the study concludes a significant positive relationship between budget planning, budget monitoring and control and performance management in Plateau State University Bokokos, Nigeria.

Recommendations

The following recommendations are drawn from the findings and conclusion of the study;

- i. Integrate budget planning with strategic planning. To ensure that the University's budget is aligned with its strategic goals, it is essential to integrate budget planning into the strategic planning process. This will enable the university to allocate resources in the most efficient and effective way possible
- ii. Implement a robust budget monitoring and control system. A well-designed monitoring and control system helps the university to track expenditure against budget, monitor financial performance, and identify potential risk areas. Regular budget reviews should be conducted, and variance analysis reports should be issued to key stakeholders.

AUTHORS CONTRIBUTIONS

Ishaku Longji Jan- Conceptualized the work and performed the data analysis and discussion

Bako Elisha Danazumi . Developed the literature review and methodology

Patience Sendi . Developed the introduction and recommendations

Yohanna Gyang Jugu Performed the supervisory aspect

Damul Mikat Bulus. Developed a section of introduction, statement of the problem and conclusion

REFERENCES

- Abeh, I. O. (2017). The practice of budgeting and budgetary control in the public sector: A study of selected government organizations in Nigeria. *Journal of Management and Social Science Research*, 39(1), 1-11.
- Adebayo, A. (2019). The Impact of Budgeting and Budgetary Control on the Performance of an Organization. *IOSR Journal of Business and Management (IOSR-JBM)*, 21(4), 1-13.
- Adeoye, A. O., & Refiloe, M. (2018). Budgetary control in public sector: the role of budget efficacy. *Academy of Accounting and Financial Studies Journal*, 22(2), 1-12.
- Adeyemo, R. A., Azeez, A. A., & Ajibola, A. T. (2019). Impact of budgetary control techniques on performance management in Nigerian public sector organizations. *Accounting and Taxation*, 11(5), 55-65.
- Ahmed, A., Israr, M., & Ali, F. (2019). Performance management and budgetary control system in public sector organizations: The mediating role of motivation. *Journal of Public Affairs*, 19(4), e1935.
- Alsaqour, R. A., Al-Tahat, Z. S., Ayyoub, A. M., & Ayoub, M. A. (2018). Budgetary control practices and performance management in Jordanian public sector organizations. *International Journal of Human Resource Studies*, 8(4), 207-223.
- Alu Chituru, V., Shiyabola, O. O., & Gbolahan, A. O. (2021). Effect of Budgeting on SMEs Sustainability in Lagos State, Nigeria. *European Journal of Business, Economics and Accountancy*, 9(1), 47-56.
- Azibaraniyar, O. (2023). An Overview of Financial Mismanagement and Financial Institutions in Nigeria. *FUO Journal of Management Sciences*, 7(Special), 153-161.
- Benjamin, H. V., & Asen, G. J. (2018). Performance management practices in a public sector organization. *Journal of Public Affairs*, 18(3).
- Brown, R., & Howard, J. (2002). Budgetary control. In J. L. Zimmer & A. C. J. Prebits (Eds.), *Encyclopedia of Public Administration and Public Policy* (pp. 261-264). CRC Press.
- Chaudhary, J. M. (2018). The relationship between budgetary control and financial performance: An empirical study of Nepal oil corporation. *Journal of Accounting and Finance*, 18(2), 31-48.
- CIMA. (2005). Participative budgeting. CIMA Official Terminology. Retrieved from <https://www.cimaglobal.com/Terms-and-Conditions/>
- Dunk, A. S. (2009). An exploration of the nature and justification of budgeting. *British Accounting Review*, 41(4), 240-254.
- Dunk, A. S., Archer, S., & Gibbons, A. (2001). Budgeting practice and organizational structure. *Strategic Finance*, 83(8), 43-48.
- Eko, A. C. (2018). Impact of budget and budgetary control on organizational performance: Evidence from Nigeria. *European Journal of Accounting, Auditing and Finance Research*, 6(9), 38-49.
- Frimpong, J. M. (2013). The effect of budgeting process on the performance of Ghanaian universities. *International Journal of Economics, Commerce and Management*, 1(11), 1-21.
- Haque, M. S. (2019). Budgetary control and performance of public sectors. Retrieved from <http://ir.iba.edu.pk/cgi/viewcontent.cgi?article=1008&context=bscs>

- Hancock, B. (2009). Effectiveness, efficiency and value for money. In R. Marston & S. M. Watts (Eds.), *Governance and intergovernmental relations in the European Union and the United States: Theoretical perspectives* (pp. 131-146). Edward Elgar Publishing.
- Horngren, C. T., Foster, G., & Dater, G. D. (1997). *Cost accounting: A managerial emphasis*. Prentice Hall.
- Igboke, O. (2017). The impact of budgetary control on organizational performance. *International Journal of Economics, Commerce and Management*, 5(6), 187-199.
- Ittner, C. D., & Larcker, D. F. (2015). Assessing empirical research in managerial accounting: A value-based management perspective. *Journal of accounting and economics*, 60(2-3), 149-166.
- Jegade, O. P. (2018). Budgeting and organizational performance: Evidence from Nigeria higher institutions. *Global Journal of Business and Social Science Review*, 6(4), 88-98.
- Joshi, S., & Abdulla, W. (2013). *Planning, budgeting and forecasting: Best practices*. John Wiley & Sons.
- Kamma, R. R. (2017). Evaluating university performance using data envelopment analysis. *Current Science*, 113(6), 1050-1052.
- Kipkemboi, J. C. (2013). Budgetary control as a tool for enhancing financial management in state corporations and parastatals: A case of the Kenya sugar board of Kenya. *International Journal of Innovative and Applied Research*, 1(4), 120-129.
- Kashif, M. (2013). The importance of budgetary control in management accounting. *Journal of Business and Management*, 14(4), 1-12.
- Leeper, C. M., & Pawelek, J. M. (2017). An increasing returns approach to participative budgeting. *Journal of Management Accounting Research*, 29(1), 15-27.
- Lindquist, T. M., & Falck, R. T. (2015). The impact of accounting information quality on budget performance, trust and fairness in budgeting. *Review of Business Research*, 15(4), 103-111.
- Mahmud, M., Alhaji, I. M., & Umar, M. S. (2017). Budgeting and budgetary control practices in public sector organizations: Evidence from Nigeria. *Journal of Accounting and Auditing: Research & Practice*, 2017, 1-10.
- Mampane, S. T. (2020). Understanding and Application of the Institutional Performance Management System within Higher Education Institution Departments. *Bulgarian Comparative Education Society*.
- Miju, A. M., & Girma, K. W. (2014). Analysis of public budgeting in Nigeria. *American Journal of Theoretical and Applied Business*, 1(2), 37-43.
- Mkrue, R. J. (2013). Budgetary control in public sector organizations: Evidence from Ghana. *International Journal of Business and Management Invention*, 2(7), 1-7.
- Mof, A. S. (2007). Public financial management: Concepts and issues. *Public Finance and Management*, 7(2), 172-193.
- Manoj, K., & Kumar, P. (2018). Budgetary control in manufacturing firms: A study with reference to selected manufacturing firms in Kerala. *Journal of Commerce and Management Thought*, 9(2), 296-305.

- Matthew, A. O. (2014). Budgetary participation and performance of Rivers State ministries, Nigeria. *International Journal of Advanced Research in Management and Social Sciences*, 3(1), 1-8.
- Minghetti, V. (2017). Public financial management reforms in Africa: Lessons learned. World Bank Group. Retrieved from <https://openknowledge.worldbank.org/bitstream/handle/10986/28717/119998-PUBPFMReformsinAfricaFinalweb.pdf?sequence=1&isAllowed=y>
- Myint, Y. (2019). Budgeting management on organization performance: A case study of Myanmar Telecom Company Limited. *International Journal of Academic Research in Business and Social Sciences*, 9(8), 632-646.
- Nair, H. S., Osamah, A. A., & Salwa, A. H. (2020). The impact of budgeting system on internal control in higher education institutions. *Journal of Economic Policy and Research*, 7(2), 163-173.
- Naseri, M. H. (2020). Budgetary control techniques and organizational performance in Malaysian public sector organizations. *International Business Research*, 13(6), 478-489.
- Nso, U. J. (2020). Budgetary control and organizational performance: A critical review of the literature and directions for future research. *Journal of Business Research and Review*, 12(2), 61-70.
- National Universities Commission. (2004). National Universities Commission reform act. Retrieved from <https://www.nuc.edu.ng/nuc-reform-act/>
- Obafemi, F. (2015). Budgeting in the Nigerian university system: A case study of Ondo State University of Science and Technology. *Journal of Education and Learning*, 4(3), 184-198.
- Olaniyan, I. O., & Efuntade, O. T. (2020). Budget and budgetary control system on financial performance of tertiary institution in Nigeria. *Archives of Business Research*, 8(4), 30-62.
- Otley, D. (1978). Budget use and managerial performance. *Journal of Accounting Research*, 16, 122-149.
- Otley, D., & Van der Stede, W. A. (2003). Management control and performance management: From control to management. *Accounting, Organizations and Society*, 28(8), 733-734.
- Salusu, J. A. (2018). Budgetary control techniques and performance management in Nigerian public sector organizations. *Journal of Finance and Investment Analysis*, 7(2), 20-31.
- Siyanbola, T. T., Salome, A. A., Ifeanyi, O. O., & Wasiu, A. O. (2019). Impact of budgetary control techniques on organizational performance in Nigeria. *Academy of Accounting and Financial Studies Journal*, 23(2), 1-12.
- Tella, A., Akinsanya, O. S., & Adeyemi, A. A. (2019). Performance management system in higher education institutions: A review of literature. *Journal of Education and Practice*, 10(36), 1-11.